Introductory Address

DELIVERED IN

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GENTLEMEN,—The earliest record of a 1st of October lecture that I am acquainted with is to be found on the first page of the first number of THE LANCET, published on Oct. 5th, 1823. The reporter of that periodical attended a lecture given by Sir Astley Cooper in the theatre of St. Thomas's Hospital, and he opens his report in the following terms:—"At half-past seven this theatre was crowded in every part by upwards of four hundred students, of the most respectable description—in fact, we never before witnessed so genteel a surgical class; the sight was most pleasing, for they all appeared gentlemen of cultivated manners and good education." Were that reporter able to visit this theatre to-day he would, I cannot doubt, be equally gratified, unless indeed he had learnt by half a century's experience that for medical students to be "gentlemen of cultivated manners and good education" was not so great a rarity as to deserve a special notice. It is a little remarkable that this laudatory notice of medical students should have been penned many years before Dickens drew Messrs. Sawyer and Allen, who were for years accepted by the public as normal types of the London medical student; and still longer before Albert Smith, himself a student of the Middlesex Hospital, narrated his fictions concerning the denizens of Gower-street which helped to fix that idea in the public mind. Happily, the public has grown wiser in course of years, and has begun to take an interest in the 1st of October quite apart from pheasants; and simply on the ground that on that day, in London alone, some five hundred young men begin in earnest that study of life and death, of health and disease, which will hereafter help thousands to live long lives of prosperity and comfort. It is with no small responsibility, then, that the teachers of a large medical school like this begin each winter session, for we feel that the welfare of others as well as your own depends upon the success of our efforts to fit you to fill your place in the profession of your choice. Anxious as we may be, however, to do our duty, our efforts will be useless unless seconded by your own, and it is to an endeavour to point out how you may best labour for your own good, and avoid those rocks and quicksands which beset the student's path, that I shall devote this lecture.

To those who return after enjoying the vacation to resume their studies with that zeal which I am happy to know animates the majority of our students, I need only give a passing welcome. They have all got over the difficulties of the fresh-man; many have successfully passed one or more of those professional examinations which, looming in the distance, appear so awful, but which become comparatively insignificant when duly prepared for at the appointed time; while some return to enjoy the fruits of former good work in clinical appointments at the hospital, the value of which those only who enjoy them can fully appreciate. Nor must I be unmindful of those good friends of our College, many of them old students here, with sons following in their fathers' footsteps, who honour us on this occasion by their presence—welcome now as always.

And now, turning to those who are about to enter upon medical study, let me impress upon them the serious nature of the undertaking in which they are embarking. Hitherto many, perhaps most, of you have pursued those studies which form the ordinary course of education of the British youth with more or less zeal and more or less success. That you must have been fairly grounded in the subjects of preliminary education is shown by your having satisfactorily passed some one of the preliminary examinations required of the embryo medical student. You will find a fair acquaintance with the classics, mathematics, and modern languages, especially the last, of direct service to you in studying medicine, to say nothing of their aid in holding that position in polite society to which you are all entitled to aspire. But you have hitherto been, as it were, in leading-strings, guided and aided by masters who have been occupied in laying a foundation upon which you must now build the superstructure. I say you must build, for it is upon your individual exertions during the next four years that your position in after-life will depend. Studious habits acquired at school or college will have their value now, particularly in the early part of your career; but study of books alone will never fit you to practise medicine. Observation, comparison, investigation must now be brought into play in addition to the cultivation of memory, which, valuable as it is, seems to be the only faculty cared for in early life. The professors of this College are no schoolmasters, to set daily lessons for you to puzzle out at home, and commit to memory for mere repetition; you will here be taught by the lectures of men who have devoted a life-time to the subjects which they teach; you will have scientific facts demonstrated before you, thus appealing to your eyes as well as your ears; and you will learn by your own manipulations to unravel again for yourselves the hidden mysteries of science which have formed the subjects of lectures or demonstrations. Whether you will take full advantage of all these opportunities must depend upon yourselves; and upon the zeal and energy you display during your student career will depend in great measure your success in after-life. But it is not only of yourselves that you ought to think, for, in whatever walk of medicine you may hereafter practise, the lives of your fellow-creatures will be entrusted to your care, and your knowledge or ignorance may make or mar the happiness of whole families. It is no light thing to become a student of the divine art of healing; and though I would on no account over-weight you with anxieties, I cannot forbear to impress upon you the responsibilities of your career.

Some of you, doubtless, though sitting here as freshmen, have already been initiated into some of the more practical details of the profession at provincial hospitals or in private practice. You will, I believe, find the advantage of this hereafter, but certainly not at present, for the knowledge of practical matters thus early acquired is apt to prove a snare to the young student by leading him to despise those theoretical studies which, in his necessarily contracted experience, seem to have no direct bearing upon the healing art. Far be it from me to decry practical knowledge; but do not let a small amount of it cause you to neglect the work of your first and second years.

Gentlemen, the curriculum of study for the medical profession has exercised many older and wiser heads than yours or mine, and you may, I think, accept the existing state of things with thankfulness. You have escaped a five years' apprenticeship, with its laborious pill-making and tincture-squeezing, mechanical labours now almost obsolete in ordinary practice, but which were supposed to open the mind as they certainly did the pores of the skin of the young apothecary. You are spared the bodily fatigue of attending one lecturer in one quarter of the town and another some miles away; nor have you to listen to those wonderful compound lectures, if I may so term them, in which one lecturer discussed two or three subjects together, ably without question, but in a manner which would be considered very unsatisfactory in the present day. Let me turn back half a century, and read you a prospectus of the year 1823, being a "Syllabus of the physiological, anatomical, and surgical lectures delivered in the school of medicine established in the west of London by W. W. Sleigh." In it I find that "four months constitute a course. The winter course commences the first Monday in October, and the spring the first Monday in January, which continues till the end of the month of May"—a curious arrangement of *four* months' courses, only to be explained on the supposition of the lecturer being of Hibernian extraction! However, the instructive portion of the paper is the summary of the courses, which is as follows:—

"*First month in each Course.*—Physiology, Pathology, and Comparative Anatomy are discussed in the following order: General division of matter into inorganic and organic—Characteristics of inorganic matter—Characteristics of organic—Differences between the animal and vegetable kingdoms—Digestion—Circulation—Respiration—Absorption—The functions of the brain—The five external senses:

sight, hearing, taste, smell, touch—The organisation or structure of the different substances in the animal machine, bone, muscle, tendon, &c.

"*Second and third months.*—The Anatomy of the Human Body: the viscera, muscles, vessels, nerves, ligaments, &c.

"*Fourth month.*—Surgery in the following order:—Three conditions of the system discussed. 1st. Inflammation—nature of, cause of, terminations of, treatment of. 2nd. Debility—divided into debilitas genuina and ficta; the former where there is actual loss of tone, the latter where there is increased action; characteristics of each. 3rd. Nosocoilia, aggravates all local affections, produces many—General morbid affections—Local ditto—Affections of various structures, as diseases of the skin, arteries, bones, joints, &c.—Manual operations—Affections produced by external violence."

Thus one lecturer, and I believe a very able one, ran through the whole of the subjects required for the College of Surgeons in four months—a feat performed nowadays only by a not less able former student of this College, an "extra-academical lecturer" with whom some of the seniors here, I have reason to believe, are not unacquainted. But even at this College some of the early professors held double chairs. Thus Sir Charles Bell was professor of physiology and surgery, and Dr. Jones Quain was professor of anatomy and physiology after Sir Charles's resignation; and it was not till some time later that separate chairs of anatomy and of physiology were allotted to those most worthy occupants, whose names are household words with us as "Quain and Sharpey." But when the medical corporations found that improved, because divided, courses of lectures were being given, they seemed determined to let the student have enough of them, for they required him in my time to attend *three* courses (of seventy lectures each) on anatomy and on physiology, in addition to all his other work, which was presumed to be got into three winter and two summer sessions. *Now*, with a curriculum extending over *four* years, you have but two courses of lectures on anatomy, with corresponding attendance in the dissecting room, and the physiological lectures are supplemented by the valuable course of practical physiology. It is the introduction of these *practical* courses which has distinguished recent medical legislation. The courses of practical chemistry, practical physiology, and practical surgery go far to fit the student for his after-career, and to fill up the gaps in medical education which are inseparable from the professorial teaching of large classes. In each of these classes you will, at different periods of your student career, have to practise manipulative proceedings under the immediate superintendence of a teacher, and you cannot fail, I think, to gain advantage from the process.

But it is in the methods of testing the knowledge of students that the greatest progress has been made of late. You will perhaps hardly believe it, but it is nevertheless the fact, that only fourteen years ago the momentous question whether a third-year's student was fit to practise surgery upon her Majesty's subjects was decided off-hand, after dinner, in one hour's time, by four ancient surgeons, who "tackled" the young gentlemen for a quarter of an hour each successively, and propounded various anatomical and surgical conundrums for his entertainment. If the candidate's powers of endurance lasted out the hour he duly passed, and was congratulated by the Court on his entrance into a noble profession, and this without having had his anatomical knowledge tested on the dead subject, or his surgical acumen on a living patient. *Mutatis mutandis*, the same farce was enacted at the Apothecaries' Hall, only the examiners there were a trifle younger and less dogmatic, and the officials less patronising, than at the sister institution. All this has been changed, however, for now the student at the end of his second winter undergoes at the College of Surgeons an examination in anatomy and physiology, partly written and partly on the dissected subject and preparations, which, as a rule, is a fair enough test of the student's knowledge, though of course accidents occasionally happen in unexpected quarters. When his course is run he is prepared to encounter a second written and oral examination at the College of Surgeons, and a similar ordeal at the College of Physicians, and is able to show his acquaintance with practical details by examining actual patients at both institutions, before receiving their coveted diplomas.

This division of the medical student's trials into "little" and "great-go" has undoubted advantages; but it also has its drawbacks, on which I shall venture a word. In the old days a student had to keep up his anatomical as well as his surgical knowledge till at least the fatal evening was over; but now he is too apt to think that when his first examination is successfully passed, he need never touch a scalpel again. Fortunately such of you as are fired with the ambition of becoming Fellows of the College of Surgeons or graduates in Medicine are obliged to undertake further anatomical researches; since if it were not so I fear the race of operating surgeons would soon be coming to an end, for certainly two winters' dissections are insufficient to give that assured surgical knowledge of anatomy without which the operator must sooner or later come to grief. If you will turn in your leisure hours to the lives of any of our great surgeons—Sir Astley Cooper for example,—you will find that they one and all not only learnt but taught anatomy at some period of their careers. Few men have kept up the habit of dissection to the last as Sir Astley did; but no one who has not laboured year after year at the anatomy of the dead subject can hope for distinction as an operator on living patients, whatever his natural dexterity.

On the other hand, the knowledge that a certain dreaded ordeal must be undergone at a fixed date tends to make the student concentrate his attention wholly on the subjects of that examination to the exclusion of all others, especially hospital practice. In the first and second winters, when the days are short, the student may perhaps be excused for devoting most of his time to the dissecting-room; but the first and second summers should make up for the *laches* of the winter sessions, if you are in any sense to comply with the regulations requiring four years' attendance on hospital practice. I am happy to remark, *en parenthèse*, that Mr. Houghton, who has recently so greatly distinguished himself at the University of London by being first in anatomy, physiology, and chemistry at the 1st M.B. examination, was one of my dressers last year, and did his work thoroughly, notwithstanding his devotion to more theoretical studies of which he now enjoys the fruits. It is, no doubt, with the view of correcting the tendency to neglect the hospital in early student life that the College of Surgeons has promulgated a recent regulation, requiring each student to examine surgical patients under the eye of a teacher for three months early in his career—a duty you will be called upon to fulfil in your first summer.

While on this point let me offer a word of personal experience which may possibly be profitable to some of you. One-and-twenty years ago to-day, when I, fresh from school, first took my seat on the benches of King's College, I listened to the words of an eloquent physiologist and surgeon (Mr. Bowman), who exhorted us to spend some part of every day in the hospital, and particularly in the out-patient rooms. I followed his advice literally I believe, and have never had cause to regret doing so. It is possible that the alterations in the course of study and the methods of examining in modern days may justify you in dividing your time more strictly between the theoretical teaching of the early and the practical study of the latter part of your career here; but rest assured of this, that the more time you can spend over the way at the hospital without neglecting your lectures here, the better practitioner you will be hereafter. It is quite possible—as I well remember myself—that you may not be able at first to understand all that you see (though a little judicious reading in some surgical manual will help a good deal); but you will have seen it nevertheless, and will be able to recognise the same common complaint again, when possibly you will appreciate the niceties of its diagnosis and treatment more fully. Surgery is, fortunately for you, so readily appreciated by the eye, in many, at least, of its common features, that you cannot fail to recognise them immediately, and a twelvemonth's steady attendance in the surgical out-patient rooms and wards will put you quite on a level with those who have enjoyed some surgical training before coming to this College. Another reason why I recommend you to be thus early in your attendance on every-day surgery is because not only will your attention be properly enough required by the physicians later on, but you will also find that, as third or fourth year's men, you will not improbably despise "the day of small things," and be unwilling to check your eagle flight of abstruse medical diagnosis and treatment in order to condescend to more

ordinary surgery. Possibly, a year or two later, when your first compound fracture or strangulated hernia is before you in private practice, you may regret not having seen more surgery while *in statu pupillari*, and this will be particularly probable if a sympathising jury of fellow-townsmen should have awarded your *quondam* patient swingeing damages for alleged malpraxis on your part. In the various surgical clinical lectures, in Mr. Marshall's valuable systematic lectures, and in the subdivisions of the course of practical surgery, you will learn to arrange your surgical ideas, to study the causes of certain effects, the results of treatment and its proper selection; but as *nemo e libris evasit artifex*, so no one, unless he has seen a good deal of the *practice* of surgery, can hope to attain eminence as a surgeon hereafter.

Do not suppose that I mean to "exalt mine office," and to cry up surgery at the expense of medicine. The days are long gone by when the surgeon kept himself to the mere manipulation of his patient and allowed the physician to prescribe for him. Surgeons nowadays have, I fancy, more faith in drugs than some physicians, and at least they know well that they cannot pretend to cure all cases with the knife, but that the judicious use of medicine is essential for successful treatment. But I use the term "medicine" in the broadest sense, and not merely of drugs, when I say that no surgeon is worthy of the name who has not studied medicine and seen medical practice in the wards as a student. Your education must not be one-sided; you must be "good all round" if you wish to be successful as practitioners; and therefore you must not, whatever your after-views may be, neglect the medical practice of the hospital. There you will enjoy special advantages from our possessing that valuable chair, the Holme professorship of clinical medicine, now so ably filled by Dr. Wilson Fox, who will instruct you in the niceties of physical diagnosis, after you have been introduced to the alphabet of the art by his assistant, Dr. Roberts. The instruction you will thus gain will be of the greatest moment to you now, and you will throughout your practice be able to go on improving yourselves in it. The bulk of your patients in general practice will be cases of so-called medical disease; and if you only lay the foundation of exact diagnosis and appropriate treatment during the last two years of your career here, you can hardly fail to become successful practitioners hereafter. You may also with advantage avail yourselves of the special departments of our hospital—the wards for the diseases of women and children, the ophthalmic department, and the department for cutaneous disorders, with those admirable baths which reflect so much credit upon Dr. Tilbury Fox.

You have, therefore, work enough and to spare before you; but not more than can be accomplished with a good will and good health. On the latter point let me say that of all trying occupations that of the medical man is most so; and that for a decidedly weakly youth to embark on a medical career is, to say the least, unwise. We are all much exposed to acute disease and accident, and we must accept the fate; but though it is sad to see men cut off by either just as they are beginning to make their way in professional life, and we have had examples of both in distinguished pupils of the College—the late J. Phillips Potter, Alexander Bruce, and James Stanton Cluff,—who are commemorated within its walls, it is still more to be regretted, I think, when young men of promise break down while yet students from causes long at work, or perhaps run an arduous career only to drop when the race is over and they are about to gain their reward. Such will not, I trust, be the fate of any here; but if you wish to have a long and prosperous career, you will be careful of your strength now by keeping regular hours, by avoiding excesses of all kinds, even of study,—by, in short, "keeping your bodies in temperance, soberness, and chastity." On one important point I believe both students and their friends often fall into error, and that is on the question of the mode and expense of living. What I mean is, that if you are to work well you must live well, and that it is the worst economy in the world to "starve the belly to cover the back." Be as economical as you can for the sake of those who have to defray your charges in anything but your food; for that is but fuel for your brains, and without plenty of good nourishment you cannot get through your work. As regards exercise I need say little, except to question whether those very violent exertions now commonly known as "athletic sports" are an essential part of medical training. I feel some diffidence in approaching this subject as you did me the honour to elect me a vice-president of the "United Hospitals Athletic Sports"; and I therefore had the privilege of seeing several young men making themselves extremely hot on a very sultry day last summer. Of course if "training" does not interfere with medical study or health, I can see nothing against it; and for myself the athletic sports have the additional charm that each year, when the hat goes round for subscriptions, I have the pleasure of making the personal acquaintance of a student previously quite unknown to me in the out-patient rooms of the hospital! Recreation of some kind you will certainly require if you work hard; and so long as the recreation is kept within strict bounds, and does not interfere with your necessary rest or with the lectures and work of the following day, the method of it is comparatively unimportant. Let me beg of you also not to fancy that you can with impunity disregard the very ancient ordinance of taking rest on one day in seven. Your brains will be all the clearer for one day's abstinence from the enticing pages of Ellis or Erichsen; and your notes of lectures will be all the fresher for having turned your minds for a season to matters not professional. To what higher uses you may advantageously devote portions of that day it is not for me to dictate.

And now, having endeavoured to stimulate your exertions in the pursuit of knowledge, I venture to warn you against over-anxiety for the possession of those rewards in the form of prizes or degrees which dangle before the eyes of every student. *Non omnia possumus omnes*, and it is impossible for everyone to be first in the race. To go in for a prize examination is good, because it gives you practice in arranging your thoughts, in putting your ideas on paper, and in finding out your weak points. But to sacrifice a session for the attainment of a single prize is very short-sighted and wrong—unless, indeed, you have unlimited time before you; and this applies as much to those higher prizes—the medical and surgical degrees of the profession—as it does to mere college medals. You must cut your coat according to your cloth, and the sooner you get a distinct idea of what you can hope to accomplish in the time you have before you the better. Those of you who have been advised to be content with the ordinary qualifications in medicine and surgery have a sufficiently straight path before them; but those who, in addition, aspire to a degree in medicine at the University of London have various perils to encounter. If the various examinations for a medical degree at the University of London embraced the subjects of medical education only, and helped forward the student to become a practitioner, I would recommend you all to attempt them, even though you failed—as some must always fail—to attain the high standard very rightly maintained by the examiners. But it is not so; the medical degrees have been so overdone with non-medical science and science which has no relation whatever to physic, that the time spent in reading for a degree must be in great part thrown away as regards your business of life. Of late years a horrible invention has been called into existence termed the "Preliminary Scientific Examination," at which candidates for a medical degree are submitted to the same tests as candidates for a degree in science. Now mechanical and natural philosophy may be, for aught I know to the contrary, the daily pabulum of that extraordinary and almost unknown animal, a Bachelor of Science; but certainly it has little to do with medicine; and I put it to the medical members of the Senate and Convocation of the University of London whom I am happy to see present, whether they have ever felt the want of being able (for I know they must be so) to answer the following question, which I take at random from this year's paper:—

"Calculate the quantity of heat lost per hour from each square metre of the surface of an iron steam boiler 0·8 centimetres in thickness, when the temperature of the inner surface of the boiler is 120° and that of the outer surface 119°, the coefficient of conductivity of iron being 11·5° (referred to 1 centimetre as unit of length, 1 minute as unit of time, and the quantity of heat required to raise the temperature of 1 gramme of water from 0° to 1° C as unit of heat)."

Now this is only one of twenty questions of a similar nature, forming two papers set before candidates for a degree in medicine last July by two learned professors whom

I have not the pleasure of knowing personally, but who seem to have singularly incorrect ideas as to the requirements of medical students. Those of you who heard the eloquent address of Professor Huxley in this theatre two years ago (THE LANCET, June 4th, 1870) may remember that he spoke very strongly on this subject in the following terms: "I entertain a very strong conviction that anyone who adds to medical education one iota or tittle beyond what is absolutely necessary is guilty of a very grave offence"; and when he suggested, in ridicule, that students might as well be required to become members of the Iron and Steel Institute, that they might know how to make surgical knives, as learn how to make every drug they employed, he could not have supposed that they would ever be expected to work out problems on steam-boilers!

I am happy to know that I do not stand alone in protesting against this over-laying of medicine with mechanical science. Four years ago a sub-committee of Convocation of the University of London, composed of some of its most distinguished graduates in Medicine, reported very strongly against the Preliminary Scientific Examination in the following terms:—"It would not be easy to exaggerate the evil effect on the medical studies of the undergraduates which must result from their being occupied during the second, third, fourth, and even the fifth, sixth, and seventh, years after their entry at a medical school, in working at the purely scientific subjects which make up the Preliminary Scientific Examination." And again—"The sub-committee are of opinion, from the evidence placed before them, that the introduction of the Preliminary Scientific Examination has tended to give prominence to theoretical and scientific knowledge at the expense of a sound practical acquaintance with medicine, surgery, midwifery, &c." Of course the answer of the upholders of the present system is that the Preliminary Scientific Examination ought to be passed before the student enters upon his medical studies; and so, in fact, it ought, were it always possible, but it is not. Neither students nor their friends are aware of all the intricacies of the medical curriculum, nor are they always prepared to sacrifice a year in studies which have no bearing whatever on their future career. And then suppose the year is so sacrificed, what are the chances of passing the examination? Four years ago the sub-committee I have already referred to showed the proportion of passed candidates during the preceding seven years to be 58 per cent., but each year since then the proportion has diminished; last year of 120 candidates only 43 passed, or 36 per cent., though this year there has been a slight improvement, out of 118 candidates 48, or 40 per cent., being successful. Four years ago I find the sub-committee stating that "the examiners in Mechanical and Natural Philosophy seem not to have been sufficiently alive to the great difficulty which the majority of young students experience in making practical applications of their knowledge, especially while they are writing answers to examination-papers, and are limited as to time"; and yet we find these same gentlemen permitted to continue to ask questions which I have the very best authority for saying are utterly unsuitable as tests of the knowledge of young students, and so long as this state of things continues the prospects of passing must remain very problematical.

And now let me give the practical application of what I have said on this subject to those now entering on medical studies. If you have already matriculated at the University of London, and intend to graduate in medicine, you must be prepared to spend five years in your studies before you can hope to obtain a degree in medicine. If you have youth, means, and ambition on your side, by all means go in and win undoubtedly the highest degree in medicine or surgery you can obtain; but it is just a question whether you will do much medical work in your first year, since you will be distracted by the thoughts of, and the necessary study for, the extravagant tests I have been describing. If you have not already matriculated at the University, and still wish to become a London graduate, I would strongly advise you *not* to begin the study of medicine, but to wait a year and devote yourself to your general studies in order to matriculate next January, and pass, if possible, the Preliminary Scientific Examination next July. I know by experience what it is to read up for the Matriculation Examination in the first year of medical study, and I say emphatically that you cannot serve two masters, and that it will be impossible for you to learn anatomy and physiology properly while you are labouring at the numerous subjects now embraced in the Matriculation Examination. And then let me add one word of counsel to those who fail in some one of the four examinations for a medical degree, and that is to accept their fate with equanimity. You may be excellent and successful practitioners without being graduates in medicine, and if you fail, as many must necessarily do, to come up to the high standard of the University, you had much better devote your energies to thoroughly learning your profession than to striving after unattainable honours. On this subject the committee I have already referred to make the following sensible observations, which I strongly commend to your consideration:—"It is to be feared that those undergraduates who break down before obtaining the degree (and these form 69 per cent. of the medical undergraduates of the University) are very often, at the end of their career as students, possessed of little more than the minimum of knowledge of medicine and surgery required by the licensing bodies, with whose qualifications they are obliged to be content." This will not, I trust, be the case with any of you, for under any circumstances you will, I hope, thoroughly learn your profession with a view to practise rather than simply in the hope of attaining honorary distinctions.

I hope I shall not be misunderstood in what I have said of the University of London examinations, or that you will think possibly the grapes are sour because I do not happen to possess a degree myself. I have every respect for the University, though I think its ruling powers are occasionally Utopian in their ideas, and as I have already said, I believe its medical and surgical degrees to be the highest in existence. I do not possess a degree because degrees in surgery are quite a modern invention, and I had no object in taking a degree in medicine which I did not want. But though I was happily spared the modern Preliminary Scientific Examination, I passed the First M.B. Examination a good many years ago I am sorry to say; and I have very good reason to remember it, because I then entered the dissecting-room of this College for the first time in order to have an interview with the then examiner, Dr. Sharpey, who intimated in the kindest manner that my anatomical paper was somewhat wanting in accuracy. I hope I have improved in that particular since then.

And now let me say a few words to those whose period of study in a medical school is well-nigh completed, and who will shortly embark in practice. And, first, let me beg them not to imagine that because their student days are over they can cease to study. Medicine is a progressive science, and if you do not take pains to keep up with her rapid strides you will very soon be left in the lurch. Besides, although you have, I hope, laid a good foundation of theoretical and practical knowledge here, you need practice in the application of what you have learnt in order to become sound medical practitioners. You must, therefore, keep up with the day by reading the medical journals and new books, and you must exercise your art on patients—remunerative ones, if you can get them—but if not, by the exercise of that professional charity which the public is always so ready to partake of. Those of you who have not been pupils to a practitioner can know but little of the routine of ordinary medical practice, and you must not be too proud to learn this very essential part of your business of life from someone older than yourself, though he may be a little hazy as to modern views and researches. To be an assistant for a time to a gentleman holding public appointments as well as private practice will fit you most thoroughly to embark in practice on your own account, and you will find little difficulty in obtaining a start in life if you have really qualified yourself in fact and not merely in name. Those of you who recoil from the daily toil of general practice, and do not covet the domestic hearth and a table surrounded with olive branches, will find opportunity for your zeal and energy in the medical services of the army and navy, or the Indian service, all of which are open to competition. Each of these has its special advantages and drawbacks, into which I will not now enter, but each has the great advantage of offering a certain income and the prospect of a retiring pension.

But some of you may be ambitious of trying higher flights than those which I have indicated, and mean to become consulting physicians or surgeons in this or some other

great city. By all means, if you have the determination to conquer difficulties, the patience to bide your time, and the consciousness of the power of industry which will be needful for success. If you imagine you can leap into practice by one successful bound, you will find yourselves grievously mistaken; nor will you require some wonderful turn of fortune to bring you to the front. You may read that Dr. Arbuthnot's fortune was made by his happening to be at Epsom when the carriage of the Prince of Orange was upset; or you will find in Warren's apocryphal "Diary of a late Physician," that his success dated from an accident to a young lady outside the opera-house; but you will only waste your time if you lie in wait for similar windfalls in these or any other localities. Similarly you will waste your time if you sit behind a brass doorplate all day long doing nothing, or even drive about in a carriage with no patients to visit. If you would succeed, you must *work* in your own home, at a hospital or dispensary, and in a medical school; but it is of course impossible to prescribe the exact form your labours should take. You must make the results of your labours known at the various medical societies and in the medical journals, or by separate publication, if you are to have the reward of them, and you must be prepared to be freely criticised, and perhaps condemned. Still you must persevere (not in your errors, however), and with perseverance and pluck you may accomplish all you desire, and possibly more than you deserve. There is no lack of hospital appointments in London, but the tenure of them does not necessarily imply the acquisition of private practice; and though it is not easy to say why one man succeeds and another does not, there are, and always must be, blanks in the lottery of professional life, and it is well that you should be warned of this before you fix upon your career.

It has recently been laid down by a public writer that "the profession of medicine, in all its branches, is one for which capital is imperatively necessary." This is obviously true if the word "capital" is taken in its largest sense, but I demur altogether to its truth if by capital is meant money only. In the first place, if money-making is a man's chief aim and object, he is very unwise to invest his "capital"—whatever it be—in the medical profession, for he will get there a smaller return than he might obtain in many honest trades. If, however, he desires a profession from honourable motives, and has fortunately some funds at his disposal to help him through the first few years, so much the easier will be his lot. But, gentlemen, the proper capital for you to possess is "brains," and if you have not this no amount of money can make you successful practitioners. With "brains" and industry you may accomplish everything you can desire, if you are careful not to place your ambition too high. The writer I have referred to draws a melancholy picture of men dropping out of the race, &c., and seems to attribute all their misfortunes to want of capital; whereas I am rather disposed to blame the possession of capital for a good many of the failures which undoubtedly occur in the upper walks of the profession. A young man with a few hundreds per annum is too apt to take it easy when his student days are over—to hold office at a hospital it may be, but to show no energy in the work of the school attached to it, or interest in the students. And why? Because he is provided for without the labour of taking pupils; he has no need to earn his daily bread, and he does not therefore seek for openings for the display of zeal and increase of knowledge. Is it to be wondered at, then, that when "our imaginary hero is forty years old," and by force of seniority rises to a position of importance and responsibility, he is very soon found to be wanting in many of the requisites for success, and, as it is graphically enough said, "is seen to be practically out of the running"? The possession of money, too, begets not unfrequently an ambition for high things not warranted by concomitant circumstances. Many a sound country practitioner has been spoiled in the making of an unsuccessful London physician or surgeon, and the "capital" which has served to maintain a disappointed bachelor in so-called "pure" practice would have well provided for a wife and children, if its possessor had been able to estimate his powers more fully, and had exerted them in the sphere to which they were suited.

But still the race for the high prizes is open to all, and no one can tell at the beginning who will be the successful competitor. A few only can win the highest honours, but all of you can win respect and esteem if, whatever your path in life, you are careful not to sully your good name by aught of trickery or dishonesty. The profession of medicine is an honourable one to all who practise it, whatever their grade may be, provided they employ themselves in ministering to the wants of suffering humanity, without pandering to its vices or yielding to its follies. You who are now students only, will, I trust, ere long add your names to the long roll of worthies who, wherever disease and death are to be found, strive manfully to resist their inroads; and believe me, though in the good things of this life some may appear more successful than others, you shall none of you lose your reward.

Introductory Lecture
ON
THE PROFESSION OF MEDICINE.

Delivered at the Opening of the Winter Session 1872-73, *at King's College, London.*

BY W. S. PLAYFAIR, M.D., F.R.C.P.,

PROFESSOR OF OBSTETRIC MEDICINE IN THE COLLEGE, PHYSICIAN FOR THE DISEASES OF WOMEN AND CHILDREN TO KING'S COLLEGE HOSPITAL, AND EXAMINER IN MIDWIFERY ETC. AT THE ROYAL COLLEGE OF PHYSICIANS.

MR. PRINCIPAL AND GENTLEMEN,—In accordance with a time-honoured custom, my colleagues have selected me to deliver to such of you as are for the first time commencing your medical studies those words of welcome and advice with which it is usual for us to begin the work of the winter session. This is a task which I undertake most willingly, and yet not without some anxiety; and this not because I have to tell you a twice-told tale, since that must of necessity be the case in an address repeated from year to year, but because I fear that in the manner of telling it I may fail to do my subject the justice which its great importance merits. To my mind, it adds not a little to the responsibility of him who occupies this place to think that perhaps some trivial word, some ill-considered sentence, may influence for good or for evil the career of those the success or failure of whose whole future life depends upon the issue of the momentous step they have this day taken.

It is not by warning or advice alone, however, that I would induce you to tread the path you have chosen in such a way as will enable you many years hence to look back upon the period of your studentship within these walls with the pride and satisfaction which we all most heartily wish you may be enabled to do; but rather, by showing you how great are the privileges and the responsibilities of the noble profession the study of which you have this day commenced, I will hope to persuade you to resolve that the opportunities now offered to you—which if lost can never be regained—will be used in the way that I know the loving hearts you have left behind you are to-day so earnestly praying you may employ them.

Last year my colleague, Professor Rutherford, talked much, as no one is better qualified to do, of some of the more purely scientific aspects of his profession. I will not, therefore, venture again to discuss topics which he has so ably illustrated, but will rather tell you something of the more immediately practical work of our calling, of the triumphs it has achieved in the past, and of the still greater triumphs we believe it to be destined to gain in the future. And in the telling of it you will, I am sure, learn enough to convince you that, though you have chosen a career which may not gain for you the world's brightest rewards, which promises you but little wealth, and still less glory, still one by no means destitute of many other counterbalancing advantages. To be the trusted friend, the valued counsellor, whose coming is so anxiously looked for, whose advice is so highly esteemed, to know that it is the proud privilege of your art to soothe the suffering and to solace the dying, it may be even to be the

means of giving back a valued life to those who had wellnigh lost all hope in aught that man can do, is in itself no slight reward, which may well compensate you for the absence of the more enticing prizes which other professions offer you. How you may best qualify yourselves for this high calling it is our aim to teach you. What, then, is the ideal physician whom we, in this College, try to train? What should a medical man unceasingly seek to be, and what should he as earnestly endeavour to avoid? More than two hundred years ago a writer gave us a definition of this very point in words so terse and so true that I feel sure we cannot improve upon it, and may safely adopt it as our own:—

> "Doctors or teachers they of physick are
> (Whether by pen they do it, or in chair
> With liveley voyce), that teach the way to know
> Man's nature, health, and sickness, or do shew
> Diseases, cause, and cure. But they who spend
> Their lives in visits, and whose labours end
> In taking fees and giving paper scrawls,
> Factors of physick are; and none but owls
> Do count such doctors."

It will require no long experience, gentlemen, of medicine in the nineteenth century to convince you that we have here clearly laid before us two types of medical men constantly to be met with in everyday life.

On the one hand you have the conscientious and scientific physician, thoroughly acquainted with the most recent advances of his profession, or, at least, as thoroughly as may be when the subject he has to deal with is in itself of such vast extent; who investigates the disease before him with all the lights which modern science places at his disposal; who, humble in his wisdom, as all wise men are, is not ashamed to gather information from every source, and makes no pretence at a knowledge he does not possess; who is not afraid to confess that the resources of his art are unable to accomplish more than they have done; who seeks to be the guide and the interpreter of nature, and never assumes that kind of medical infallibility which so often says to the patient, in fact, if not in words, "What a fortunate thing it is for you that you have placed yourself under my care, for, thank God, I am not as other medical men are."

On the other hand, we have a practitioner whose claims to the confidence of his patients are based more on his own self-assertion than on any real knowledge of his subject; who is satisfied to go on from year to year with the slender stock of information which long ago enabled him, with so much difficulty, to scrape through his examinations and obtain a qualification, careless of the advances of science, and content if only he can induce others to believe in his skill, whether he possesses that skill or not; and who, heedless of the terrible responsibilities of his calling, imperils and too often sacrifices to his own small and petty interests the precious lives which have been entrusted to his care.

Many and many a man there is of this stamp, holding it may be even a high place in the estimation of the public, whose reputation is based on some such rotten foundation as a soft and unctuous manner, an imposing equipage, or a specious use of pseudo-scientific terms calculated to impose upon the ignorance and the credulity of his clients, and who, in deed and in truth, is as blatant a quack as if he stood on a cart at the corners of the streets and proclaimed the value of his wares with the blast of a trumpet, as did the travelling empiric of old.

Nor need it be a matter of astonishment to you that such men should so often achieve success, as the world deems it; for our art makes no pretence at being a certain one, and indeed, in the very nature of things, it must be otherwise. For though the physician may place his patient in the way most favourable for recovery, though he may guide him with helping hand over the difficulties of the path, the issues of life and death must ever remain in the hands of Him from whom life comes. Nor has it results to show which can be estimated and appreciated by those who are ignorant of its technicalities, as other professions have. The architect can point to the building which is the evidence of his skill, the artist to the picture which is the record of his genius; but the greatest triumphs of medicine leave no lasting trace behind them, and can never be properly judged of by those who are ignorant of the mode in which they have been gained.

Nor need this discourage us. It should matter but little to us that the base and the unscrupulous may succeed in the practice of what they are pleased to call medicine, so long as we know that we are doing our best to qualify ourselves to practise it as the pursuit of our lives in a spirit of earnestness and truth. The charlatan and the pretender to a knowledge which he does not possess may possibly find it more easy to obtain dupes in ours than in other professions; but there is none which is entirely free from his pernicious influence. But you may be certain that in medicine, as in everything else, the only good policy is the honest one; and the sure passport to success is, not a dependence on any false and adventitious aids, but the building of a strong foundation of knowledge, such as you may here acquire slowly, by degrees, and not without much honest toil, but without which your life's work will be unreal, unsatisfactory, and little else than a sham.

But, to practise medicine in this spirit, you must be convinced that it is in itself a study worthy of such loyal work. There are those who point to this very uncertainty of which I have talked, and argue from it that our art is altogether a fallacious one. They speak of the proverbial differences of opinion among doctors, and draw the inference that where there is so much that is doubtful there can be nothing that is reliable. And there are even those in high places, and professing to be leaders of public opinion, who tell us, as did *The Times* in a leading article some years ago, on the occasion of the opening of the medical schools, that medicine has absolutely no progress to boast of which can for an instant compare with that of other professions, and that instead of couching these introductory addresses in a tone of jubilation we should rather use them as occasions for throwing dust and ashes on our heads, and for apologising for our numerous imperfections and shortcomings. Did I believe this to be the case I should advise you to withdraw the false step you have taken, to turn your energies into some other channel, and not to devote the labour of your lives to a delusion and a lie. But it will require no great trouble to convince you that statements such as these are as false as they are ungenerous. It will be no hard task to point out to you the immense strides which medicine has in reality been taking, and to prove to you that it has fairly kept pace, even in this age of rapid progress, with other branches of knowledge. And I think we may even flatter ourselves that, for the first time in the history of our profession, the Legislature is beginning to appreciate the importance of attending to questions directly connected with our profession. Year by year more attention is being paid to the great topic of public health, which promises ere long to assume the importance which it justly merits. And we need not, perhaps, despair of due recognition being given to it when the chief of that great political party which, rightly or wrongly, is supposed not to look with overmuch favour on changes in the current order of things, assumes for himself so medical a war-cry as "Sanitas sanitatum, omnia sanitas."

We might even be content to rest our proof of the reality of medical progress on what it has done in this one department alone, and done under the most unfavourable conditions, with no aid from State help, and in the face of much opposition from ignorance and prejudice on all sides. From the single immortal discovery of the Gloucestershire village surgeon alone, a discovery scoffed at at the time of its promulgation by even the wise and learned of the day, and which has achieved its marvellous success, in this country at least, without that assistance which a wise legislation should have afforded it, and which would have so materially aided its efficacy, no less than 80,000 lives are saved within these islands every year, and about 50,000 per annum on the continent of Europe. We may well ask our detractors to point to any one thing which human knowledge or human skill has done for the human race which can bear comparison with this.

And what vaccination has done for small-pox medicine is capable of doing, although, no doubt, as yet less certainly and less effectively, towards eradicating some of those only less fatal forms of zymotic diseases, the extreme prevalence of which amongst us we are justified in regarding as a blot upon the boasted civilisation of the nineteenth century. When, some years ago, the pockets of our butchers and our farmers were threatened by an analogous disease amongst cattle, its spread was at once and effectively stopped by legislation; and when, a few weeks ago, a fresh outbreak of the disease was

threatened, we have all seen with what commendable energy health inspectors rushed all over the country to nip its progress in the bud. But a hundred and ten thousand human lives are lost every year from zymotic disease in England alone—not to talk of Scotland and Ireland,—and upwards of half a million on the continent, at a cost of misery and desolation which no one can calculate, and yet no measures are taken to enforce that isolation and those other precautions which medicine is ready to show would stop their spread. If, as Sir James Simpson has put it, with his usual force, a rattlesnake or a tiger were to escape from a travelling menagerie into a school full of young children, it would not do half as much damage as a boy or girl imperfectly recovered from measles or scarlet fever; and yet if the one event were to happen the whole of England would ring with the horror of the story, while the other is of daily and of hourly occurrence, might easily be prevented, and no one thinks it his business to interfere. Only a few months ago, when walking in Hyde-park, between the Marble Arch and Hyde-park-corner, a spot filled with children of all ranks of life, I met a little girl covered with small-pox eruption, who might without exaggeration be said to be spreading death and destruction on every side of her; and when I pointed her out to the park-keeper, I was told, civilly enough no doubt, that he had no power in the matter. That these things are so is no fault of our art. She is ready with remedies which at least would materially diminish these evils, and the responsibility of not applying them must rest with others. Years and years ago medical men pointed out the risks of defective drainage and polluted waters. Nothing was more clearly proved than the certainty with which such an easily remedied state of things produced death and disease; and yet it required something very like Sydney Smith's celebrated experiment on a bishop to impress the lesson on the public mind. When the heir to the throne lay prostrate and on the point of death from a preventable disease people began to think it time to put their houses in order, and to listen to the sermon which our profession had been for years preaching to heedless ears. Here again it was not medicine that was to blame—she stepped in, and, by God's grace, gave back to the trembling nation the life which its own apathy had placed in jeopardy—but rather the machinery by which the thing itself should have been prevented, and which she herself was powerless to apply. And illustrations such as these might be multiplied in abundance, and will readily enough suggest themselves to all of you. And yet this department of public health as a branch of medical science is almost in its infancy, capable no doubt of immense development, but by no means the one in which the progress of medicine most conspicuously shines.

And when we come to consider the more everyday and practical work of the medical man of this generation, his means of detecting disease and referring it to its true cause, the aids to the acquirement of accurate and reliable knowledge which medical science places at his disposal, and the improved methods of treatment at his command, how immensely great are the advances which have been made. If there is one characteristic more than another which distinguishes modern medicine, it may safely be said to be the scientific spirit in which it is cultivated. True the physician is not now the great medicine man that he used to be. He no longer attacks disease *vi et armis*, as when he deemed it an intruder to be got rid of at all risks. How much of this haphazard work could be traced to the custom by which the gains of the practitioner were measured, not by the intelligence he expended on the case, or the results he obtained, but by the quantity of physic he could induce his clients to swallow, it would be useless now to discuss. Happily, this most pernicious practice is now almost a thing of the past, remembered only to cause astonishment at the prodigious endurance and faith of the much-suffering patients. It is not surprising that such a system produced such scepticism as is expressed in the letter written by the young prince, wise above his generation, to the nobleman who was his tutor: "My Lord, I would not have you take too much physic, for it doth always make me worse, and I think will do the like with you."

We sometimes hear a complaint made, one which I believe to be based on a most erroneous assumption, that far too much attention is paid in modern medical education to what may be called the more scientific branches of study—that the student is so muddled with a mass of abstruse knowledge of minute anatomy, the complexities of structure as displayed by the microscope, the profundities of organic chemistry, and the mysteries of pathology, that he has no time and no brain left to master the practical work of recognising and, above all, of treating disease. The argument is, no doubt, a specious but, as I think, a most fallacious one. Suppose your watch out of order, whether would you entrust it with most confidence to a workman with a practical knowledge of some only of the accidents to which watches are most liable, or to the skilled mechanician thoroughly acquainted with its structure?

No doubt over-much attention to one department of scientific medicine is a mistake. If a man chooses to devote all his time to the study of chemistry or physiology, to the exclusion of other things, he unquestionably cannot become a practical physician. But the abuse of a thing is no argument against its proper use, and you may depend upon it that he is likely to become the best practitioner in the future who builds on such a foundation as due study of the subjects I have indicated alone can give. It is not in this College, at least, that a sneer at scientific medicine is likely to meet approval. When Todd and Bowman worked for years at physiology, many no doubt could have been found, and probably were found, to say that they were devoting their energies to a subject which would little fit them for the practical work of their profession, and yet it would be difficult to name two more eminent or more successful practitioners. And were it not that their presence here prevents me, it would be easy to illustrate the same thesis from the work of others of our staff, which must, however, be familiar to most of you.

Look for a moment, too, at some of the advances of our art which we owe more or less directly to a study of these subjects. What, for instance, would be the state of our knowledge of the diseases of the nervous system, even yet almost in its infancy, were it not for the increasing accuracy with which the minute anatomy of the great nervous centres has been studied, and the pains that have been taken to elucidate their physiology by experimental research? It is surely not too much to say that the labours in the dissecting-room and physiological laboratory of such men as Marshall Hall, Brown-Séquard, and Lockhart Clarke have done more to increase our knowledge of these diseases, and improve our means of treating them, than whole centuries of merely practical observation. What, again, would we know of diabetes, and many other obscure changes of nutrition and secretion, but for the light thrown on them by the researches of organic chemistry? And how, but for the persevering use of the microscope, could we explain so many of those changes in the structure of the body by which our knowledge of various forms of disease has been so greatly increased—as, for instance, fatty degeneration of structure of primary importance, as of the muscular tissue of the heart? These, and hundreds of other examples that might readily be cited, are surely more than sufficient answers to those who cavil at the time and labour devoted to these more abstract studies.

Do not for a moment suppose, however, that in making these observations I am depreciating in the slightest degree the study of the practical part of the profession. Nothing is farther from my intention; no mistake could be more fatal. All I contend for is that the one must be the necessary supplement of the other. After all, the main work of your lives is to be the detection and cure of disease, and the relief of suffering; and to that end all your labour must tend. But to attempt this without such a basis as I talk of would be to land us in sheer empiricism; and although there are those who tell us that the practice of medicine is and can be nothing else, still it surely is our duty to do what in us lies to make it as little so as possible.

By all means, then, erect as noble a structure of practical knowledge as you can, the nobler the better; but for your own comfort and peace of mind build it upon solid rock, and not upon mere shifting sand, or woe betide it when the rain descends and the winds blow and beat upon it.

It will, moreover, require but little attention to the vast improvements which of late years we have seen in the more immediately practical work of our calling, to see that the study of the scientific branches of medicine has by no means retarded progress in other directions. For example, how much improved are our means of accurately determining the physical changes connected with disease than they

were but twenty or thirty short years ago. Then the stethoscope, if not a modern invention, had not been worked at as it has been since, and the knowledge derived from its use was comparatively imperfect; now the physical changes going on in the lungs and heart are as certainly known to us as if they took place on the exterior of the body. The thermometer was then an unknown instrument in medicine; now we are able to trace the progress of pyrexial disease from day to day, watch its course, and foretell its results with an accuracy previously undreamt of. For hundreds of years the pulse, as felt by the fingers, had been the only index by which the state of the patient was estimated; now its indications can be registered by the sphygmograph in a manner previously quite impossible. The depths of the eye can be scanned by the ophthalmoscope, the recesses of the larynx become as clear as day. In my own special department a whole class of most important diseases have been removed from the region of uncertainty to that of accurate knowledge. The wards of our hospital, perhaps more than those of any other, in the triumphs of conservative and plastic surgery they have to show, will bear witness that our surgeons have not been backward in the race. And perhaps my surgical friends may allow me also to remind them how greatly their labours have been lightened, and the sufferings of their patients alleviated, in the space of time I mention, by the marvellous discovery placed at their disposal, along with some other improvements in surgery which they have not quite as warmly welcomed, by an obstetrician.

Merely to name but half the advances the practical part of our profession has made would occupy far more time than I have at my disposal to tell of them. Let no one then say that either the science or the art of medicine is at a standstill, or that the cultivation of the former has in any way hindered the progress of the latter.

Such then, gentlemen, is the profession you have chosen, and I have but ill performed my task if you have not gleaned some idea at least of the spirit in which it is to be followed. You may, perhaps, have some idea that all the toil which this imperfect sketch may seem to indicate as necessary for its successful pursuit may not be essential in your individual case. You may think that some lucky chance, some piece of good fortune, may be in store for you which may spare you so much labour. If so, you are surely most mistaken. I do not believe much in chance or fortune in any profession. So far as I know it never made an eminent barrister or a successful merchant, and though it may have now and then have got a man a rich living, it certainly never made a good clergyman; and, above all, it never has, and it never will make, such a medical man as I hope each and all of you will aim at being. For that there is but one royal road, that of good, honest, and continuous work. With that to back you, you need have no fear of failure in your calling. True you cannot all hope to arrive at eminence—"Non cuivis homini contingit adire Corinthum,"—but the sick and the suffering you have always with you, and very sure I am that there is no one among you who may not, if he chooses, here qualify himself to lead a useful and an honoured life, and gain for himself a sufficiency at least of this world's goods.

It may be that to-day, when so many other schools are opening wide their doors to receive new aspirants to medical honours, you may wish to be assured that you have done wisely in the choice of an *alma mater* you have made. Perhaps it would not be becoming in me to say much on this point; nor is it very needful. The number of eminent medical men that have been trained within these walls, who have gained for themselves an European reputation, is of itself the best proof of the kind of teaching you have at your disposal. But it may perhaps be better permitted to me than to another—since, though I am proud to belong to this school, I am, strictly speaking, not of it, having received my medical education elsewhere—to assure you that I believe no institution offers you better opportunities for the successful and thorough study of your profession.

It is, I think, needless for me to dwell, as is so often done on these occasions, on the particular departments of study to which you will have to devote yourselves, or on the best mode of following out the curriculum laid down for you. All this will soon make itself clear to you. You will have no difficulty in finding out what you have to do. I have attempted to show you, however imperfectly, the spirit in which it ought to be done, and it remains for yourselves to carry these precepts into practice.

If there be any among you who by disposition belong to the drones of the hive, I greatly fear that nothing I could say will induce you to change your nature. If such there be, it is some satisfaction to us to know that here they will be the wrong men in the right place. The students of King's College have long ago shown that if there be the idle and the dissolute among them, they are, at any rate, not of them. The typical medical student of the past is fortunately almost an extinct species, and if here and there diligent search may discover a rare specimen of the Bob Sawyer type, in this place at least he has long ceased to exist, if, indeed, he ever found in it a congenial habitat. Our students may justly claim to be second to none in the lighter portions of their occupation; there are among them most sturdy athletes, and even, as we have recently seen, most admirable histrionic performers; but I think you will find that he is most highly esteemed amongst his fellows who works the best.

What more, then, need I say, but remind you, in the words of the immortal writer to whose works we always go when we want much wisdom compressed into a little space, that "'Tis in ourselves that we are thus or thus. Our bodies are our gardens, to the which our wills are gardeners; so that if we will plant lettuce or sow nettles; set hyssop or weed up thyme; supply it with one gender of herbs or distract it with many; either to have it sterile with idleness or manured with industry; why, the power and corrigible authority of this lies in our wills."

So working, gentlemen, it cannot but be that when the evening of your lives shall come, and when perhaps you may revisit these halls, as some honoured faces before me show that others who have preceded you have done to-day, you will be able to apply to yourselves the words of the same great poet, as God grant you may,—

> "Because in my youth I never did apply
> Hot and rebellious liquors to my blood,
> And did not with unbashful forehead woo
> The means of weakness and debility;
> Therefore mine age is as a lusty winter,
> Frosty but kindly."

Abstracts

OF THE

INTRODUCTORY LECTURES

DELIVERED AT THE

VARIOUS MEDICAL SCHOOLS OF LONDON

AT THE

Opening of the Session 1872-73

CHARING-CROSS HOSPITAL.

INTRODUCTORY ADDRESS BY DR. JAMES WATT BLACK.

AFTER offering a friendly welcome to the students, and referring to the recent changes in the hospital and staff, the lecturer proceeded to state the nature of the task which the medical student has to perform, and urged the importance of thorough preliminary training as a preparation for professional study. "It is not," he said, "so much a large amount of general knowledge that is required as the possession of well-cultivated intellectual faculties, well-exercised senses, and a habit of continuous application. It seems to me that our preliminary examinations are too aimless—too little framed in accordance with the special requirements of the medical student. While proof of memory is abundantly insisted on, there is, I venture to think, no sufficient test applied to the candidate's other intellectual powers. For this latter purpose, evidence of the mastery of one well-selected subject would go further than the exhibition of a smattering of fifty. Again, it might be advantageously insisted on that the candidate should show adequate powers of observation, to say nothing of any sense except that of

sight. This might easily be done by demanding a practical acquaintance with an objective science, such as botany, zoology, geology, or even entomology. Further, it is perhaps matter for regret that more prominence is not given to the subject of physical science. It is in physics that we find the explanation of a great mass of medical phenomena, and to the student who has not attained considerable proficiency in that science many of these phenomena must be unintelligible. Lastly, in order to ensure as far as possible that men shall come fresh to the study of medicine, it might be wise to require the passing of all preliminary examinations some time—say two or three months—before beginning the professional curriculum. It may seem to you too late thus to press on your notice the importance of preliminary training, but it is still in your power to remedy some of its defects by well-directed industry in the pursuit of your medical studies."

The lecturer then proceeded to insist on the necessity for downright honest, hard work, on the part of every medical student, and spoke of certain principles which should guide them. "But do not allow yourselves to be led astray by the notion that good preliminary training followed by hard work will of themselves suffice. Mere indiscriminate plodding will never fit you for your profession. Your procedure should be regulated by a just estimate of the qualifications requisite for medical practice. At the same time you must take care lest your reason become blinded by your tastes. By all means cherish any special tastes you may possess, and derive from them what pleasure and profit you can, but do not let one pursuit rob another of its due share of attention. As students you must not be specialists.

"It should be your ultimate aim to combine in just proportion science and art. In the practitioner these two agencies should always go hand-in-hand. The result they yield is like the multiplication of two factors which, added together, make up a given number. The product is greatest when the two factors of the multiplication are equal. It is diminished if one of them be reduced, even though the other be correspondingly increased. The most exact and extensive knowledge will be of little use to you if you cannot apply it to the prevention, diagnosis, and treatment of disease. On the other hand, so-called 'practical skill,' unsupported by scientific knowledge, is utterly worthless and even misleading. The mere practical man is in reality a mere *doctrinaire*, full of false pathological theories which often form the basis of a mischievous treatment. You cannot have too much scientific knowledge, but you must not spend all your time in acquiring it. Again, you cannot have too much practical skill, but that, to deserve the name, must be based on scientific knowledge. As a man may know all the principles of art, and yet be as incapable as a gorilla to make a picture, and as another may produce daubs which he imagines to be fine pictures, though they contradict all the truths of nature, so it is in medicine with the merely scientific and the merely practical man."

The uses of lectures were next touched on. "But," he continued, "though it is well to say a word in favour of lectures, it is still more desirable to guard against overestimating them. With many students the tendency is to rely too much on lectures and books, and to shape their course with far too exclusive reference to examinations. They think they can never have enough of the class-room and the manual, and become altogether bookish. The cause may be partly found in the character of the examinations themselves, for there can be little doubt that these compel students to cram their memory with many minutiæ which have little or no bearing on practice, and which might be profitably exchanged for increased practical knowledge. This is the more to be regretted because books are always at hand, whereas hospital opportunities once past never return, and clinical phenomena,

"'Like a snow-flake on the river,
A moment there, then gone for ever,'

cannot be reproduced at will. However valuable and even indispensable lectures and books may be, they should never be allowed to usurp the place of the dissecting-room, the laboratory, and the ward. As much of your knowledge as possible should be personal, not derived. Anatomy, for example, which is the backbone of medical knowledge, cannot be learned from books and lectures alone. You require to dissect and see for yourselves. No doubt you need to be told what is to be seen and how to display the objects to view. But external aids are merely signposts to direct you, not carriages to convey you. You must trudge every inch of the road on your own feet. While medical teaching by books and lectures, if carried too far, enervates the best intellectual faculties, the direct study of nature ennobles and invigorates the mind.

"Students absorbed in their pursuits and impressed with the magnitude of the task they have to accomplish, are prone to overlook the fact that unremitting toil is not the most productive. When a man is fagged his work is comparatively profitless, as well as exhausting. Generally speaking, all labour should be suspended when real fatigue sets in. Each man has to find out for himself what amount of time he can most profitably devote to work. Anyhow, to produce the maximum of result, the health must always be kept up to the requisite standard.

"In the curriculum of everyone there must be a certain amount of leisure time. A portion of this may be pleasantly occupied in learning the use of the various instruments of medical research. Every student should possess a good microscope, and can amuse himself by examining different substances and textures. It is an excellent introduction to the practice of auscultation in the ward to familiarise the ear with the healthy breath, heart, and other sounds at home. Two students can accommodate each other in this particular. The same is true of the ophthalmoscope and the laryngoscope. The sense of touch can be educated by exercising it on one's own person. When all this is done there should still be sufficient time left for non-professional recreation.

"To those who have a love for their profession there is abundant compensation for all their toil. On the other hand, men whose heart is not in their studies are sure to find their work distasteful and their progress slow. They who desire nothing more exalted than the making of money would attain their object with far less trouble in some other calling. Whilst medicine is a noble profession, it is a mean and miserable trade. If you aim at success, you must even possess some degree of positive enthusiasm. Frequently the ardour of the student is chilled by anxious misgivings as to the beneficial effects of medical treatment. He is perplexed by present diversities of practice and by past changes in the general treatment of disease. Fifty years ago, he says, doctors were perpetually bleeding, purging, and salivating, and vaunted the success of their bold measures. The doctors of to-day, he continues, discredit that system of procedure, and are yet equally satisfied with the results which they obtain by very different means. Is it not probable that within the next fifty years, or sooner, the therapeutics of to-day will in turn be overthrown, and proved to be hurtful rather than beneficial?

"Differences of opinion and of practice are inevitable whenever men come to think and act for themselves. In this respect medicine is in no worse position than other departments of learning. Conflicting opinions are to be found in theology and law; yet theologians and lawyers have the benefit of authoritative written standards—a boon which is denied to the medical practitioner. In medicine, too, the differences of practice are often of much less extent and importance than they seem, for, happily, there are frequently more ways than one of procuring a good result in disease, and two different methods may prove equally successful.

"To pass to the second objection, several considerations might be offered with reference to the changes which have occurred in therapeutics in modern times. For example, it may be legitimately pleaded that the treatment of our forefathers was largely dictated by theoretical notions concerning disease and the effects of remedies, while modern treatment is more and more based on actual results. Further, the theories on which treatment was formerly in great measure grounded were frequently erroneous. Mistaken views were entertained respecting the existence of peccant humours which could be purged out, depraved blood which could be let out, and ill-defined morbid processes and poisons which could be altered or eliminated by mercury. An increased and increasing knowledge of pathology has greatly corrected our ideas regarding the means capable of acting beneficially in disease. Thirdly, the treatment of bygone times was mainly traditional. We can have no

assurance of the intrinsic merits of a system which has been handed down by tradition and adopted without question. In the olden days of bleeding, there was, in medicine, comparatively little of that wholesome questioning spirit which prevails in our time. The fire of criticism has been ruthlessly assailing the hoary dogmas of the medical art, and bids fair to consume all in them that is false. We hail it as our best friend, next to the faculty of construction; and we want to see it blaze yet more fiercely and widely amongst the remaining rubbish of therapeutics. A fourth reply is to be found in the fact that our predecessors of fifty years ago seldom dared to let diseases run their natural course, and so never discovered that in many acute cases the natural processes tend to bring about recovery. Finding that they could often relieve pain, dyspnœa, &c., by their heroic measures, they failed to perceive that the relief was usually procured at too great a cost, and that better recoveries, and more of them, could generally be obtained through the use of gentler methods of treatment. Till we know the natural history of a disease we cannot form a sound judgment on the effects of treatment. Another answer is that all the treatment of fifty years ago was not comprehended in unnecessary bleeding, purging, and salivating; and that in many things we can commend and usefully imitate our ancestors. Though they were wrong in some particulars, we have found them right in many. Though we must sift and correct their results, all honour be to them for much good work accomplished. They laboured, and we who are entered into their labours owe them full acknowledgments. They not only accumulated an immense amount of knowledge of disease, but they also devised a great part of the treatment now in use. It is only when we put our own shoulder to the wheel that we discover the difficulties with which this department of medicine is beset, and learn to honour duly those to whom our present position is attributable.

"The mere fact of change is no proof that the foundation of medical treatment is insecure. Though every change cannot be characterised as a ringing out of the false and ringing in of the true, yet absence of change means absence of progress. One is, indeed, free to confess that therapeutics has not yet made progress commensurate with its importance, or with the position of some other departments of medicine. But the zeal and exactitude with which the physiological action of remedies is being studied, and therapeutic facts are being observed and recorded, at the present time, are eminently cheering. Though therapeutics is a lazy boy, who, during a long childhood, has been always lagging behind his fellows, there are plentiful indications that, as the years of discretion have stolen upon him, he has been leaving off his early foibles, and that, feeling his gigantic powers stir within him, he has awakened to a consciousness of his high destiny. Already he has burst many of the shackles which contributed to retard his progress, and is eager for triumphs which will gloriously redeem his reputation. Innumerable therapeutic facts of priceless value have been ascertained, and, though we cannot as yet group those facts into a scientific system, we are now able to discern it in outline. In so far as we have learned the nature of those changes in structure, qualities, and function which constitute disease, and the conditions which favour or impede the natural processes and effects, we are in a position to treat disease scientifically. This knowledge is immensely in advance of the position it held fifty years ago. One highly valuable result of a better understanding of the pathological nature and natural history of disease is this, that we are thereby prevented from making mischievous attempts to perform the impossible."

The lecturer next spoke of the pleasure derivable from a study of the exquisite structures and processes of the human body, and passed on to the evidences of design displayed therein, arguing that, though some seemed to think otherwise, these evidences are not impaired by Darwinism, even should it be accepted as true. He concluded by an allusion to the Great Healer.

ST. GEORGE'S HOSPITAL.

INAUGURAL LECTURE BY MR. ROUSE.

MR. ROUSE commenced his address by paying a tribute to the wise liberality with which the governors of the hospital had at all times sought to promote the welfare of the school and to increase the facilities for medical education. He then took as his chief subject the need of a well-grounded self-confidence in all those who undertook the heavy responsibilities of medical and more especially of surgical practice, showing how often the well-being, and even the life, of a patient might depend upon the preparedness of the surgeon to act, not only rightly, but also with a promptitude that should lose no precious moments, and with a decision that should win the confidence of the sick man and of his friends. In order to act thus it was necessary for the practitioner to possess a firm assurance in the adequacy of his own knowledge, and this assurance could only be gained by the diligent employment of all the opportunities of the student-days—opportunities to which those who had neglected them never failed to look back with bitter and unavailing regret. The lecturer then pointed out in detail the relation borne by every department of medical study to the general end in view, and enlarged upon the methods of working by which his hearers might hope to obtain the greatest advantage from each of those arbitrary divisions of the healing art which had, indeed, no place in science, but which had been, to a greater or less extent, sanctioned by custom and justified by convenience. He showed that every surgeon should be fully conversant with the principles and practice of medicine, and every physician with the principles and practice of surgery, in order that each might recognise the occasions on which the sister art might beneficially assist or even replace his own. In conclusion, he urged upon the students the necessity for earnest and diligent work, and promised them that those who conscientiously sought to fit themselves for their future career should in no wise lose their reward.

GUY'S HOSPITAL.

DR. PYE-SMITH'S INTRODUCTORY LECTURE.

AFTER paying a tribute to the memory of Mr. Alfred Poland, the lecturer welcomed those who had chosen the profession of medicine, and had come to Guy's to learn it. To those he would say, that if their aim was to be rich, they had made a mistake. If the money to be spent on their professional education were invested in trade, it would increase much sooner, and with less trouble. They would have in medicine to do a great deal for nothing, while they might leave very little behind for others to enjoy. Let them not work solely for reputation or influence, but rather for the sake of the profession itself; for even in science the very worst way to progress was by seeking to make brilliant discoveries. They would derive happiness from the fact that they were exerting their best faculties in trying to alleviate misery, while exempt from the trials and losses incurred in the pursuit of riches which those in trade had to endure. Dr. Smith then went on to refer to the future studies of the students. Medicine was the art of preventing and curing disease. He would not attempt to define disease, but would simply say that it included all which caused bodily pain, or was so dangerous that people would try to get rid of it, and the doctor's duty it was to assist them in so doing. Prevention was better than cure, and a large class of diseases were of the preventable kind. It was, therefore, the student's duty to make himself acquainted with all the requirements of a healthy body in respect to air, water, food, &c.; so that, wherever he might be, he would be able to make himself a centre from whence a knowledge of healthy conditions would be disseminated. After speaking of disease, and giving instances of its operation, Dr. Smith went on to show that there could be no system of therapeutics; that homœopathy, allopathy, and other so-called systems, were fallacies; and that, instead of being a science, therapeutics was an art, and an art which depended upon a knowledge of many sciences. Speaking of the more practical parts of the curriculum, the lecturer urged students during the first eighteen months to devote themselves to anatomy; for, if they did not learn it then, they would never learn it at all. Then, when they had passed their first examination, let them turn their studies to account, and for this purpose nothing was better than to be surgical registrar. The second year was to embrace physiology, the third clinical work, and the fourth and last the study of those branches such as applied to the

eye and ear diseases—branches which were often neglected, and which he urged them never to neglect. After dwelling upon the subject of study in its various forms, Dr. Smith spoke of recreation. They would not, of course, devote all the hours they spent in London to their profession. They would find some time for general reading—and rightly; only let them make a resolution to give up newspapers—they would then know how much better one was without them. Let them study Goldsmith rather than the *Daily Telegraph*; but, above all, let them practise outdoor sports. In conclusion, Dr. Smith referred to a difficulty which the student might meet with in the course of his studies, and that was, he might at times be unable to reconcile his observations of facts with the traditional records of religion. About that difficulty Dr. Smith urged them not to trouble themselves, but rather let them rest in knowing that the greatest names in science, as Newton, Leibnitz, and Faraday, were men who never interested themselves in trying to solve the multitude of questions which probably were not to be solved.

THE LONDON HOSPITAL.

MR. HUTCHINSON'S INTRODUCTORY ADDRESS.

THE lecturer congratulated those commencing their career on their choice of a profession. He assured them that, as far as his observation had extended, there was none on which a man could more confidently rely for the certainty of earning a good livelihood, and he thought there was none which, on the whole, would more favour their mental and moral development. The pursuit of medicine, considered in its wide sense as a branch of natural study, tended to create in the mind an enthusiasm for truth and a courage in its pursuit which could not but be most beneficial to character. Besides, medical men from their peculiar opportunities of becoming intimately conversant with others, from the frequency with which they became acquainted with noble acts of self-devotion, as well as from their insight into the physical basis of moral peculiarities, had an advantage over most as regards the growth of their sympathies. The lecturer next proceeded to assert, in opposition to the rather widespread opinion that the study of physical laws is inimical to the growth of the higher moral faculties, such as reverence and faith, that it had in reality the opposite effect. He thought that much misapprehension on these subjects had accrued from mistakes as to the real basis and nature of the faculties in question, and denied emphatically that true insight into things as they are could by any possibility be prejudicial to our trust and confidence in things as they will be. He next proceeded to illustrate the way in which the teachings of nature supplement and reinforce the lessons derived from revelation by demonstrating the true relations of the past to the present, and the present to the future. Arguing from the indestructibility of matter and of the natural forces, heat, electricity, and the like, he argued that the mind trained to scientific pursuits had but little difficulty in believing that the same law obtained in the moral world. In conclusion, he congratulated all present who were engaged in the cultivation of natural science. It was the study of facts and of truth. He hoped he had asserted there was no sort of danger in it, and that, on the contrary, it would strengthen all their nobler faculties, both mental and moral. The genius of knowledge was no sceptic; she, indeed, "delightedly believes divinities, being herself divine." To students he would say, "Be diligent, be scrupulous, be courageous in the investigation of facts. Take first those which concern the practice of the profession which you have chosen," for these were absolutely essential in order that they might do justice to those who employed them, and he was much mistaken if they would not find the study of disease, considered merely as a branch of natural history, as full of interest as any of those which are often ranked as more attractive.

ST. MARY'S HOSPITAL.

MR. NORTON'S INTRODUCTORY ADDRESS.

MR. NORTON said it was not his intention to enlarge upon any collateral branch of science connected with the profession, but it was his desire to point out what a student should do, and should not do, during the period of his curriculum, and then went on:—"There is a fault which we most of us have, though in a variable degree, but it is fearfully developed in many—procrastination. It is present, not in one's pupilage only, but, unless battled with, it clings to the man through life. Often are we struck with some bright idea which we are anxious to develop, but we put off its consideration, and it is gone. By procrastination not alone are ideas lost, but deeds, fortunes. Not a few men rely on their talent, and they put off work till it is too late; their talent fails them, private circumstances are said to necessitate them presenting themselves for examination, and they are unsuccessful. Opposed to procrastination is energy, a virtue rare, which rivals talent. The energetic man usually shows a superiority over his more talented opponents. He rarely loses an opportunity of improving himself, he questioneth and learneth much; he grasps at little things, and so develops great things. With confidence then can I promise reward to you who possess energy. Your mental capacity may be less than your rival's, you may be heavily weighted against him in the race, but you have an advantage which he cannot or will not grasp, and, like the tortoise in his race with the hare, you will go by him while he sleeps.

"You must understand that by coming to a medical school, you will not learn how to diagnose and to treat cases by rule. We cannot reduce medicine or surgery to a mechanical process. There are many similar symptoms associated with dissimilar diseases. There are many drugs, many varieties of treatment, available for the same disease. Again, a remedy successful in the treatment of an abnormal condition in one individual is not necessarily successful in the treatment of what is apparently the same condition in another individual. Your judgment is brought into requisition. It matters not whether you cause a wound to heal by means of lotions or ointments, or whether you cause it to heal by means of rest alone. Both are the means to an end, and by each way the end is attained. In the one case, it may be preferable to employ a prolonged treatment rather than remove the patient from his ordinary avocation. In the other case the chief aim of the patient may be to avoid pain.

"I instance these simple points in order to show you that you are about to enter a profession in which science and art are combined, in which ready judgment is necessary, and in which, therefore, there must be grades of opinion, according to talent and experience. It must be a comparatively large mind at once to compass all the points which bear upon a case, however slight: the causes of the disease, the vocation, constitution, idiosyncrasies of the patient, surrounding circumstances, and the treatment. You have chosen a profession in which there is no difficulty of becoming interested—a profession at once attractive and philanthropic. We can often promise recovery where despondency prevails. We can often with a word overcome all anxiety, all doubt and fear. Let your course be upright, truly serving your patients, and you will have your reward. You will gain the respect and affection of those who know you, and you will find your returns sufficient to give you comfort and independence, if not luxury.

After paying a tribute to what the Apothecaries' Hall had done for the profession, Mr. Norton continued:—

"Now comes the question, would it not be possible to add to the preliminary education several of those subjects which are at present taught in the medical schools? The time we have is too short to teach medicine, and yet we have to work into that time several extra studies, any of which might occupy a man's life."

Referring to the out-patient department, he said—"It unfortunately happens that the physicians and surgeons of the out-patient and of the special departments attend at the same time as the physicians and surgeons of the wards, and in consequence a very profitable form of instruction is neglected. The number of out-patients is probably ten times greater than the number of in-patients, and the variety of diseases perhaps ten times more common in general practice. When occasions present themselves, take advantage of them to attend to those departments; but it is useless to go there now and again."

On the subject of examinations he said—"They should extend over not a few hours, but a week. They should embrace searching examinations in the diagnosis and treat-

ment of disease at the bedside. If there should be a conjoint examination—and I trust there will be—we should require all the examiners that are now occupied in the several separate corporations. . . . . .

"Now I would address a few words to you who are our advanced students. At the termination of this session many of you will become qualified to practise, and will take your departure from among us. I beg you to consider that, as I have endeavoured to prove, when you are qualified you are still by no means perfect. It will be necessary for you to continue your reading, and to keep yourselves, by means of the journals, *au courant* with the new theories and practice, and with all the latest improvements and inventions, and it will be well for you to make a note of every important practical point of which you may hear or read from time to time. . . . . .

"In the month of April, the month of examinations, I find that those men who know but little invariably consider themselves certain to pass, whilst those who are well up have a lurking fear that they may be unfortunately examined upon something doubtful. It is a fact, curious, but true. The former set of men are totally ignorant of many things, and therefore have not the least suspicion that they will be examined upon them; whilst the latter set, who have read well, know the difficulty of compassing such extensive subjects. Curb, then, the feelings of self-satisfaction which arise within you on obtaining your diploma, and go to your new homes with the knowledge that you have not the experience of your seniors. If you differ in opinion from a neighbouring practitioner, deal leniently and carefully with the matter, recollecting that great men have erred, and that your opinion is not necessarily the right one. Yet another point I would refer to, though I know that some will differ from me. If no cottage hospital exists within a moderate distance from your neighbourhood, endeavour to found one. I do not consider cottage hospitals false charity, for I myself have seen many patients who could be benefited in no other way. It would be the means of saving the life of many a cottager who in his own residence has neither nursing nor nourishment, and would lead you to investigate and to improve your knowledge. If you are the sole medical officer it would give you a position above your neighbours; but to this I object. A cottage hospital should be truly a charity, and not a private speculation. All the surgeons around should have the opportunity of attending patients within it. I am convinced that if such institutions were more numerous the general knowledge of practitioners would be increased, and the distance between the general practitioner and the consultee would be diminished. Such advice from a consultee may appear suicidal, but from another point of view it may appear associated with a selfish motive, for if all practitioners were fully alive to the results that can be effected by surgery there would be many, very many, cases transferred to the surgeon who are now left to linger in their discomfort.

"In conclusion, I would say that we, as your teachers, feel the responsibility which we are undertaking. It is no light matter to make the lectures attractive and intelligible to all of you. We have a difficult task to perform, but it is in your power to materially lighten our burden. There is no greater pleasure to us than to see our pupils successful. To an extent we, teacher and pupil, are bound together in our school. Our pupils' success reflects upon us. We are desirous to retain a good name, and we beg you to assist us to do so."

MIDDLESEX HOSPITAL.

INTRODUCTORY LECTURE BY DR. THOROWGOOD.

THE lecturer on Materia Medica, Dr. Thorowgood, delivered the introductory address this year at the above hospital. After a few preliminary remarks, the lecturer invited the attention of his hearers to a short consideration of the position in which the medical profession stood to the public as healers of their diseases. Allusion was made to the fact that the earliest history of every nation showed that medical art was soon called for and brought into exercise. The Chinese, it appears, are able to trace their medical code as far back as 2000 years before Christ. The Hebrews, under the inspired teaching of Moses, were in advance of other nations in their cultivation of preventive medicine and sanitary science, stress being laid on dietetic rules, ablutions, separations, destruction of infected garments, and so forth. A high tribute of public gratitude is due now to those who have been forward in the investigation of the cause and method of progress of epidemic diseases. The effect of this kind of research has been already to diminish the mortality from malarial fevers and ague from 44 in 1000 to 27, and from 30 to 20, and even as low as 15. So with regard to typhoid fever, sanitary inspectors have over and over again showed how this disease is propagated by bad drainage and polluted water; and the lecturer ventured to hope that when more heed was paid to the teachings of sanitary medicine on these matters the mortality from typhoid fever might be reduced—if, indeed, the disease were not entirely extinguished like the sweating sickness and other epidemics of the middle ages. At present it seems, on the authority of Dr. Budd, that typhoid fever kills 20,000 persons annually in this country, and lays prostrate for a time 140,000 more.

After alluding to the certainty and success so often attending the skilful and advanced surgery of the present day, and admonishing students also to continue to pay the same careful attention to the science and practice of midwifery that they had done during the past summer session, Dr. Thorowgood proceeded to speak of the various processes of medical therapeutics and the science and art of drug-healing as applied to disease. While the treatment of disease is certainly the great end of medicine, this end is not to be jumped at before a right beginning has been made. Physicians in old time had exhibited too great a tendency to comply with the popular clamour for active treatment, and so to set in force powerful agencies for treatment without clearly knowing what it was they were treating.

The man who, ignorant of the processes and tendencies of disease, yet asserts himself as great in active treatment, is but a hindrance to the progress of true therapeutics. He will treat a simple case of constipation with some abdominal pain, without, however, the pulse, aspect, or position of true peritonitis, with bleeding, leeching, and salivation, and then declare he has cured an inflammation of the bowels. Inflammation of the brain and delirium tremens get at his hands similar treatment; and while perhaps the patient with brain inflammation gets well under depletion, the other almost certainly dies, not because drug-giving is an uncertain and fallacious art, but because the doctor does not know how to tell one disease from another.

These sort of therapeutists are fond of quoting such phrases as "In summos morbos summa remedia," and "Melius anceps quam nullum remedium," with much satisfaction; while the words "Abstine si methodum nescis" would be a far better and safer motto for them in their practice. Consider how carefully we now feel our way in the use of active treatment, though we are aided in our diagnosis by stethoscopes, microscopes, and thermometers; and then think of physicians a century or two ago, with none of these guides, bleeding, leeching, and purging in the most violent way, and none can wonder that our profession as well as the public at times look distrustfully on one who boasts himself a man for heroic treatment.

The doctors who two hundred years ago stood forth pre-eminently as successful in treating disease were not drugging men. Sydenham in 1660 acquired great repute by his simple and rational treatment of small-pox by cooling diet and regimen, and his distinguished successor Radcliffe was constantly in serious quarrels with his colleagues for bluntly telling them that they killed sick people by their over-much treatment. Radcliffe appears to have known disease well, and in his later years he used to tell Dr. Mead that while as a young beginner he had twenty remedies for every disease, as an old physician he could find twenty diseases for which he had not one remedy. It was an intimate knowledge of disease and its effects that made Mead, Baillie, Graves, Abercrombie, Alison, Hope, and many more, great physicians and dexterous in the use of drugs.

Let the student then set himself to learn disease well, and let this knowledge be the basis of his therapeutics. It is very true that almost by instinct sick people demand treatment, but this need not consist in trying to find a drug for every symptom; and when people see that the doctor is familiar with their malady they will soon learn to trust

him, and acquiesce in his plan of treatment. At times all the physician can do is to watch and wait; he cares for the patient in the sense of the word *curare*—

"Est medici curare, auroque remunerat æger,
Sanare e cœlo munere gratuito."

By the blessing of God on the patient tending and watching of skilled physicians, the life of H.R.H. the Prince of Wales was, as it were, given back to him. The experience of those able men who tended His Royal Highness in his severe illness taught them that there was a long piece of troubled water to be passed before the haven of safety could be gained, and the untimely interference of art might but cause confusion and danger. Well-meaning people suggested all manner of remedies to cut short the long disease, but had the physicians forsaken the path of experience for that of experiment, the case might have been sadly like that of the sea captain who entrusted the steering of his ship to one of the passengers who promised to take him by a short cut. The result was that the ship ran on the rocks and was lost, though passengers and crew were saved.

In seeking to gain knowledge of the action of drugs, these must be pure and given with as little combination and complication as possible. No knowledge of botany or chemistry will enable us to predict the effect of a drug at the bedside. Experiments made on animals may be of some service in just showing what part or organ of the body a given drug specially affects. Thus mercurials seem to act on the liver, and given to dogs in health act so as to cause biliary obstruction, while their action on sick human beings seems to be the very reverse. Moreover many drugs poisonous to man are innocuous to many of the lower animals. Hence the effect of drugs must be studied on patients, and often good is done before it is clearly known how the drug acts. Melampus, 1398 years before Christ, found iron to be a fine tonic, but it is only lately that we have found how iron acts as a blood restorer.

In conclusion, Dr. Thorowgood congratulated the students on the creditable way in which their hospital stood with the examining boards. Allusion was made to the changes which had taken place in the hospital staff and to the losses the hospital had sustained in the removal of its friends and supporters by death; the death of Dr. J. Davidson being especially mentioned.

The establishment of the Broderip scholarships for students to compete for who have completed their third winter course, and of the two entrance scholarships, was spoken of as matter of special congratulation, as was also the kindness of Mr. Hills and Mr. Gale in so completely renovating and restoring the Materia Medica museum.

Finally, the lecturer urged study of disease at the bedside and among the out-patients, and he advised men when in practice to strive and uphold meetings for the discussion of medical and surgical subjects, and occasionally for more convivial purposes, for by these means many small misunderstandings and jealousies may be nipped in the bud.

As a consolation to the successful but often hard-worked and toil-worn doctor, the lecturer finished with the well-known lines:—

"O mortal man, that livest here by toil,
Do not complain of this thy hard estate;
That, like an emmett, thou must ever moil,
Is a sad sentence of an ancient date.
And certes there is for it reason great;
For if sometimes it makes thee weep and wail,
And curse thy lot, and early drudge and late,
Withouten that would come a heavier bale,
Loose life, unruly passions, and diseases pale."

ST. THOMAS'S HOSPITAL.

INTRODUCTORY LECTURE BY MR. JOHN CROFT.

AFTER thanking the Treasurer, Governors, and friends for their presence, Mr. Croft proceeded to welcome those for whom the inaugural address was more particularly designed—viz., gentlemen just entering on a student's career. He reminded each "that he becomes identified with St. Thomas's, the hospital and college becomes his Alma Mater. He joins a 'corps,' as it were—a 'corps' second to none for friendliness, sincerity, and loyalty." He said: "In what spirit are you prepared to enter upon the studies before you? You are to study nature in health and disease that you may make a living, perhaps win honours and fortune, by alleviating and curing some of the ills that flesh is heir to. In what spirit do you approach this task? Do you come with the limited desire to accumulate in your memory only a store of knowledge of facts which will enable you to practise to get a living? Or are you inspired with an eagerness to find the *truth* in nature, to understand her laws, and to be guided in your practice by the result of such researches? That is the spirit in which I would have you approach the study of the sciences which it will be your privilege to make your own. One of Lord Bacon's apothegms is this: 'Nature is only conquered in obeying her.' You must *feel* that he is right. She is a grand and beautiful mistress, and her votaries must approach her reverently and humbly. She will lead them aright if they will follow closely and faithfully. The difficulty and the trial is to obey. To the manly heart and pure spirit she will yield her wonders and bounties, whilst these remain hidden from the view of the weak and idle. And now, gentlemen, whether you take this important step in your life with an eager spirit of industry, a listless sense of compulsion, or the ignoble mind of a trader, you must learn to work, and work to learn." He pointed out that in the first place they were to make themselves acquainted with the known facts of medical science and the inferences or inductions from them; and in the second place, by observation and experiment, or experience, to endeavour to understand the application of these facts and the theories built upon them. "With respect to facts, seek for them; make them your own; stick to them. You will have to become the slave of these facts—to *obey* them; in time you may hope to conquer them. It is one thing to learn the facts as facts, to make a collection of them in the memory. It is quite another to interpret them. Observation and experiment carried on with patience and accuracy are necessary for the interpretation of facts. You will discover, what your predecessors have experienced, that you have to learn how to learn, how to collect facts, how to observe, how to experiment."

Passing to the special course of study incumbent upon them, he pointed out that study of the art of curing or mitigating the diseases and deformities of the body must be preceded by the study of pathological science, and that an inquiry of that nature could only be founded on a complete and accurate knowledge of the science of life in health or the physiology and anatomy of the body. These latter must form the foundation on which the superstructure is to be erected. He urged the necessity for an early devotion to those sciences. They would be entitled to no higher position than the ignorant and despicable quack if they were content to be only superficial anatomists and physiologists. After enumerating the various methods by which they might learn, he dwelt on the special value of dissection in cultivating a habit of personal research, delicacy of touch, confidence and dexterity in the use of the knife. Quoting Sir Astley Cooper, formerly a lecturer at the hospital: "That, sir, is the way to learn your profession—look for yourself, never mind what other people may say; no opinion or theories can interfere with information acquired from dissection." He then paid a just tribute to the great merits of Mr. George Rainey, the senior demonstrator, whose "single-mindedness and sense of duty, unsurpassed skill, and sound intellect, were themes on which his old pupils were proud to dwell." He reminded the students of the respect they should observe to the dissecting-room; and, turning to the subject of physiology, he informed them that without an adequate preliminary training in the elements of chemistry and natural philosophy they would not be in a position to attack this subject. He bade them learn all that the lecturers and demonstrators could teach them, and more than all, and then they would find that to penetrate and grasp the beautiful, and no doubt simple, truths of the phenomena of life, there was yet a lifelong work before them. "Does this appear discouraging? It is said that Alexander the Great sighed that there were no more worlds for him to conquer. Had his conquests been carried on in the dominion of science he would never have found cause to utter such regret." He referred to the admirable and compact laboratory for practical physiology which had been fitted up under the spirited superintendence of the lecturers on physiology, &c., and then directed their attention to the study of comparative physiology, the science in which John Hunter was so great

an observer, and to whom comparative anatomy may be said to owe its existence as a science. He advocated its study "not only because a knowledge of it is required for the higher medical and surgical degrees, but for the intrinsic value yielded by the philosophical pursuit, and the personal pleasure it is the privilege of its votaries to enjoy." He passed over such topics as botany and materia medica, which would occupy them during the first summer session, to other courses of study for which chemistry, anatomy, and physiology were preparatory—pathology, medicine, surgery, and obstetrics. Pathology was stated to be "the keystone of the bridge which the mutually dependent medical sciences and arts combine to form. On the one side it is sustained by the anterior sciences of anatomy and physiology; on the other side by medicine and surgery. Take away the central science of pathology, and the bridge becomes at once impassable to the passenger whose aim is medical or surgical practice. But the relationship between these sciences and arts is even yet more intimate, for they support and advance each other. Need I point out to you that the man who launches into the practice of this noble profession without an adequate appreciation of the science of life in disease is of no higher rank than the obsolete barber-surgeon, or the present too fashionable charlatan." He mentioned the respective values of the lectures, the wards, the bedside, the out-patient rooms, the operating theatres, the post-mortem room, the museum, containing specimens which are the substantial records of the labours and fame of such men as Cline, Tyrrell, Travers, Sir Astley Cooper, &c., as fields for research; and then adverted to the good which may result from the study of comparative pathology, and directed attention to the Brown Institute for the Treatment of Diseased Animals.* Turning to medicine, surgery, and obstetrics, Mr. Croft said, "What is meant by the science and art, or, in other words, the principles and practice of medicine and surgery?" He defined medical science as embracing all that *is*, that happens in the human body, in a state of health and disease; and the medical or healing art as consisting of a series of rules or directions for the guidance of the physician or surgeon in his practice. The principles of medicine, surgery, and obstetrics, might be learnt from the various lectures and books, of which there is no lack, but the practical knowledge can only be obtained by most diligent personal observation and care. He impressed that upon them, reminding them of Gibbon's statement, that "everyone has two educations—one which he receives from others, and one, more important, which he gives himself." "To be proficient in the art of practice you must particularly cultivate skill in observing, skill in reasoning, and skill in action. The grand fields for this kind of self-education are the wards and out-patient-rooms of this splendid hospital." He felt bound to say that though appreciated by some of the students, yet by too many of them those departments were sadly neglected. He referred to the various excuses alleged by students for non-attendance, and told them that they were wrong, and that the responsibility rested with the student as much as with the physician or surgeon; and he said, "I would impress upon those who in due course will receive the practical appointments (of dressers and clinical clerks), that in taking upon themselves the incumbent duties they become not mere functionaries as regards clerkship and dressing, but at the same time tenants of rare posts of observation and reflection, and if they omit to exercise and improve those faculties they will not be fulfilling the just expectations of the profession to which they aspire." He also reminded them of their obligations to the institution and to their patients. Referring to the wards and out-patient rooms as grand fields for observation and experience, Mr. Croft said: "It is true that, in consequence of the monstrous rates now exacted from the funds of the charity, the number of in-patients has been (temporarily, it may be hoped) reduced to about 400; numerically the hospital, therefore, is still a large one. But it is also true that the clinical character of a hospital does not depend on the number of patients it can accommodate, but upon the classes of cases which are collected in its wards and out-patient rooms, and upon the industry and talents of its medical and surgical staff. This exaction and its result have given occasion for the repetition of certain reflections and criticism; but is that to be wondered at? Royal hospitals, in common with royal personages, must pay the penalty of greatness." He next dwelt on the value of the power of observation, and on the necessity of acquiring early a habit of precision and accuracy; and enumerated the various instruments that have been invented as auxiliaries to observation in the art as well as to the science of medicine. He briefly mentioned the habit of methodical observation, and the practice of attending only to the material circumstances of the case in hand. With reference to "skill in reasoning," he said: "The man who neglects to employ and cultivate this talent sinks into the mere empiric, and from that time becomes a drag upon, rather than a promoter of, the art he professes." He advised his hearers to study logic as a system, and to read the illustrations of the vice of hasty conjecture and incomplete observation abounding in works on the method of inductive reasoning. He quoted an instance cited in Mr. J. S. Mill's work—viz., that of Sir Kenelm Digby's sympathetic powder; and, as a contrast, "the patient, philosophical observation and reasoning of one man, in rank a physician, but justly claimed as the property of mankind—Dr. Jenner, the discoverer and promoter of vaccination." After some appropriate remarks upon "skill in action," the lecturer said, that "from whichever direction the student regards it, he cannot but see that practical acquirements must contribute to assist and advance the pursuit upon which he is engaged."

Botany and materia medica being briefly alluded to, opportunity was taken to express a trust "that the elements of botany and chemistry will soon be included in the list of subjects for preliminary examination." Of what the lecturer termed the "aids to self-education," a few concise words of advice were offered—viz., on reading, note-making, intermutual examinations, and discussions. He warned his hearers that the career before them was an arduous one, but encouraged them with the words of Charles Mackay:

> "If thou canst plan a noble deed,
> And never flag till it succeed,
> Though in the strife thy heart should bleed,
> Whatever obstacles control,
> Thine hour will come—go on, true soul!
> Thou'lt win the prize, thou'lt reach the goal."

And of others. He bade them take example by noble lives. He reminded them of the inspiriting tale of the Hellenic hero Perseus, and repeated, in the beautiful language of the Rev. Charles Kingsley, the stirring address of Pallas Athené to Perseus, and added: "Are there not heroes still, and are there not Titans and monsters yet for heroes to fight? Alas! too many—epilepsy, hydrophobia, tetanus, cancer, consumption, small-pox, cholera, fevers, and the ignorance, supineness, and prejudices which help to breed and foster these odious monsters. These are *some* of the direful brood with which you will have to contend. Generations before you have done battle with them, but still they live to scourge us. Much has been achieved by the noble lives that have been spent in the long and mighty struggle, but much remains to be done. Living men around us and amongst us are heroically pressing forward in the glorious if arduous task, and are present testimony that the spirit of chivalry still flourishes." In conclusion, the lecturer said: "I appeal to *you* who are with hopes and fears this day launched amidst the temptations and charms of a student's life; to *you* who return to win fresh honours or with gallant determination renew the contest; to *you* who have hitherto yielded too easily in the race, or preferred your pleasure to your duty; to *you* who are embarking in the calling which has been sanctified by the 'Great Physician,' whether you employ your talents at home or abroad, in peace or war, among the poor or the rich; I appeal to you ever to remember that you have a widespread duty to fulfil—a duty to your friends and relatives by whose love and care you are or have been fostered—a duty to the philosophical and beneficent profession to which you belong—a duty to the 'Alma Mater' who bids you maintain the heritage of fame inaugurated by the great Cheselden—a duty to your neighbour, whether in the form of the sufferer who claims the assistance it is in your power to give, or in the form of a fellow-labourer in prosperity or difficulties; and lastly, and above all, a duty to the Great Creator who formed the noble work called man, and endowed him with talents to be used in his Maker's service, and who, in placing him in the midst of disease and suffering,

* This institution was established in 1871, in the Wandsworth-road. It is under the auspices of Dr. Burdon-Sanderson and Dr. Klein.

wills that he should be moved by the sight of them to the active exercise of that loving beneficence which is the creature's best approach to the divine perfection."

WESTMINSTER HOSPITAL.

INTRODUCTORY ADDRESS BY MR. G. E. LEGGE PEARSE.

AFTER referring to the old students of the hospital who were present, and expressing the gratification he felt at their presence, Mr. Pearse addressed the younger portion of his audience. He impressed upon them the great importance of studying their profession with diligence while there was yet time, of storing up knowledge, of making hay while the sun shone, that in future years they might be able to look back with pleasure on their student days. While mentioning some of the chief diseases and their causes, the lecturer said:—"Now let us look upon one of the most distressing cases we have to contemplate. Behold a man whose energies are destroyed, whose body is diseased, whose mind is debased, by indulgence in alcohol—that fluid which, sent us as a blessing, only too often becomes a curse, and for the curtailment of the abuse of which some means have just happily been taken by the Legislature. Lastly, we turn our attention to certain poor creatures, the victims of that malady—perhaps the saddest of all—engendered by their own vice and debauchery, and for the diminution of which that most useful provision, the Contagious Diseases Act, was originated." They should—and in saying so he addressed the older part of his audience—leave no stone unturned to support to the utmost of their power, when the time arrived, that useful measure, which the bigotry, narrow-mindedness, and ignorance of many seemed now likely to overthrow. After describing the chief subjects embraced in the medical curriculum, and pointing out their relative importance, Mr. Pearse noticed the great necessity for clinical observation. He spoke of the inestimable value of dresserships and clinical clerkships, and more particularly the appointments of house-physician and house-surgeon, which the Westminster Hospital bestows as prizes on its most diligent students. Having touched at some length upon the advantages, the pleasures, and trials of the medical profession, the lecturer concluded by saying:—"We cannot all hope to become Coopers, Brodies, Pagets, or Fergussons, but 'England expects every man will do his duty;' and if we do ours soberly and earnestly, in however modest a sphere, such an one will leave behind him a perennial monument in the hearts of all those he has served in his earthly ministry."

FEEDING BY THE NOSE IN ATTEMPTED SUICIDE BY STARVATION.

BY D. ANDERSON MOXEY, M.D., M.R.C.P., &c.

(*Concluded from p. 446.*)

THE stomach-pump is, I believe, the most unmerciful engine for the purpose of feeding that has ever been invented; if, therefore, any future operator is determined to reach the stomach only by way of the mouth, in spite of all the evidence that has been adduced of the infinite advantages of the nasal channel thereto, then, for goodness' sake, let him at least try some of the more humane expedients that have been devised for the purpose, and not revive the obsolete use of that most dangerous and lethal of weapons. Instead of the œsophageal tube, let him, as a minor cruelty, insert through the perforated gag, after he has managed to screw it in between the clenched teeth of the unfortunate victim, a No. 12 gum-elastic catheter, which may be connected with either a double-action enema apparatus or a small glass syringe; or else let him compress the patient's nostrils, and thrust between his jaws the feeding-spoon with the tubular handle. Let him do this, or anything else, rather than use the stomach-pump. Better than all, let him open his mind to conviction, and in suicidal cases discard every other system of alimentation in favour of feeding by the nose; for, after all, the catheter and feeding-spoon are only in a comparative degree less dangerous than the stomach-pump; and as for nutrient enemata, a resistance may be made against them as strong and as effectual as against the mouth-feeding appliances. Moreover, as much damage may result to the bowel from the rectal piece as to the throat from the œsophageal tube; and no power on earth can prevent the suicide ejecting the enema as soon as it is administered.

For corroborative evidence of the successful employment of nasal feeding, in these and other cases, I must refer my readers to the articles already quoted from. But surely enough has now been advanced to satisfy every reasonable mind, and to prove that it were simple madness to select a channel to the stomach that admits of struggling and exhaustion on the part of the patient, and violence and bloodshed on that of the operators, when there exists, in the nose, a passage always available, over which the patient has no control, and in the feeding through which the surgeon experiences no difficulty and sheds no blood.

Let me now detail, in as few words as may be, how nasal feeding ought to be conducted in the case of a suicide, such as the one under consideration.

1. Before entering the cell, ascertain that the prisoner has no stool with which to threaten the integrity of your brains.

2. Let the prison authorities, if need be, handcuff him, and put him into a strait-waistcoat, or other contrivance whereby his arms may be controlled, and, if possible, his legs also. There can be no difficulty in this; nor, in the case of a condemned criminal who wishes to defeat the ends of justice, need there be any over-strained delicacy. If the process of pinioning that Calcraft has practised, at some time or other, in most large gaols in England, and which is probably familiar to most prison officials, be not sufficient, then let one of the ordinary contrivances by which destructive lunatics are restrained from tearing their clothes or injuring themselves or others, and which may be seen in any county asylum, be adopted.

3. Take with you three warders at least (four or five if you do not employ any mechanical restraint), and firmly, strongly, but not violently, lay the man on his back on his bed, the pillows being removed. With such overwhelming odds against the prisoner, violence is unnecessary, and resistance ridiculous. If three warders only are present, let one control the legs, and the other two the arms. You must manage to get the head over the end of the bedstead between your knees, and thus hold it steady yourself. If you have a fourth warder, he can attend solely to the head in the manner just indicated. If there is a fifth, and the patient is unusually strong, he may advantageously help the warder who is engaged with the legs. In this way there can be no excuse for not controlling the man absolutely; and depend upon it the prisoner will soon see how useless is struggling against such a force, and will resign himself to his fate with the best grace he can.

4. Having rendered him practically, if not absolutely, motionless—and let this be true of the head in particular,—then elevate the chin slightly, and gently introduce a small smooth wedgwood funnel within, and only within, one of the nostrils, holding it there lightly and without pressure during the entire administration, remembering that it is used merely as a convenient medium to supply the food to the nostril. Through the funnel thus held, pour from a jug, bottle, or sauceboat, slowly and gradually, with occasional pauses that the patient may take breath—for the reflex acts of deglutition, infallibly excited and vainly resisted, which follow the transmission of liquids through the nares into the pharynx, come so thick and fast that a rest now and then is necessary,—any fluid or semi-solid nutriment that may be desired. From a series of experiments instituted on my own person, and detailed in my original essay, I can affirm that from a pint to a quart can be thus administered in from five to ten minutes, and that the strongest beef-tea, wine, and even a pint at a time of the mistura spiritûs vini gallici of the British Pharmacopœia, with the addition of a strong dose of Liebig's extractum carnis, can be given without causing the eyes to water or the Schneiderian membrane to smart.

5. After the administration of food, do not leave the prisoner the use of his fingers to "put into his throat, causing him to vomit the food which has been injected." It is hardly necessary to show how this simple matter may be

arranged; but, to make my advice complete, I would suggest that the mechanical restraint, if it has been used, should not be removed till digestion is accomplished; if it has not been used, handcuffs might be tried, or he might be tied down on the bed hand and foot.

6. Repeat the nasal feeding every four hours, till the disappointed and disgusted suicide entreats permission to feed in a more reasonable manner. I do not like to be too sanguine, but I think four of these enforced feeds would bring him to this healthier frame of mind. It would not be the pain, or even the discomfort, attending the administration—they are practically *nil*; but the petty annoyance, the wounded vanity, the humiliating inability to offer the slightest resistance, the feeling of total helplessness in the hands of others—these are what would conquer him. And the very irony of the situation—his utter powerlessness either to achieve his object or to avert its frustration—would at last become so intolerable that he would gladly relinquish the suicidal attempt, and, let us hope, bethink him of some worthier manner of spending his last few days on earth. A man does not like to be made ridiculous, even if he is going to be hanged.

To conclude. In the next case of attempted "suicide of a murderer"—for, be assured, this report, which has been circulated over the length and breadth of the land, will produce a crop of imitators,—if this treatment be adopted, his life will be spared till his country requires it of him, an opprobrium will be removed from the healing art, and the aim and object of this communication will be answered.

ELEVATION OF DEPRESSED CRANIAL BONE BY PNEUMATIC TRACTION.

BY H. W. LARKIN, M.R.C.S., &c.

THE operation of trephining is a hazardous one. Even in the best hands it is attended by no small risk of wounding the dura mater, and thereby inducing fatal encephalitis. The operation is, from this cause, almost as perilous as the condition which it is intended to relieve. So far is this true that in this country, according to Erichsen, about seventy-five per cent. of the subjects operated on die; whilst across the Channel its history is still more unfortunate.

I have recently, in a case of persistent congenital depression of cranial bone in a child, employed pneumatic traction with complete success; and I believe that in many, perhaps most, cases of depressed fracture of the skull, whether occurring in children or adults, this mode of elevation will be found not only more easily practicable, but infinitely safer than that by the trephine.

A short time since I was called to a child a few days old, the site of whose right frontal eminence was occupied by a depression of about an inch and a half in diameter. At birth the child's head had presented abnormally. The maternal expulsive pains had been very strong, the pubic arch somewhat angular, and the child's right temple driven in. Unlike similar depression of the parietals, which is usually transient, being righted, *sua sponte*, immediately after the liberation of the head, this was persistent.

The concavity thus formed was not regular—such as is produced in a thin convex metallic plate when pressure is made on one point of its surface—for in addition to the ridge which formed the circumferential line of the depression, there were two sulci crossing it. The sharpness of the ridge and sulci respectively indicated that the elasticity of the bone had been overtaxed, and that permanent deformity was a probable result.

With the view of restoring the bone to its proper shape, a cupping-glass was applied over the depressed portion. Difficulty of exact adaptation was overcome by forming a cell of ordinary glazier's putty. Exhaustion was effected by a small air-pump. A few seconds proved the experiment successful, for the depressed bone gradually rose and assumed its normal contour. The glass was allowed to remain a few minutes, and was temporarily re-applied the following day. There was no observable constitutional disturbance. The temples are now symmetrical.

Bilston.

DR. CHARCOT ON OVARIAN HYPERÆSTHESIA.

(*Concluded from page 156.*)

7. I AM now going to enter upon the most important part of this investigation—namely, the exposition of facts which will have the effect of bringing out still more forcibly the predominating action of ovaralgia in one of the forms of hysteria.

You have just seen how methodical compression of the ovary may determine the production of aura, and even, occasionally, of the fit itself. I will now endeavour to show you how energetic compression is capable of cutting short the development of the fit when it is just beginning, and even to stop it when the convulsive phenomena are more or less advanced. You will distinctly observe this in two of the patients that have been placed under your notice. In these two cases the arrest determined by compression, when properly effected, is complete and definitive. In my three other patients compression only modifies the phenomena of the fit, in a variable degree, without causing cessation. And it is important to remark that in all these patients we have to deal, not with ordinary hysteria, but with the most formidable type of convulsive hysteria, I mean hystero-epilepsy. When the fit breaks out in one of these women, she falls suddenly to the ground, uttering a loud cry, and is quite unconscious. Tetanic rigidity of the limbs, which usually ushers in the fit, exists in a high degree; the body is strongly bent back, the abdomen prominent, considerably distended and resistant.

The best condition for exhibiting ovarian compression is to place the patient flat on her back, either on the floor or, better still, on a mattress. The medical man then, resting a knee on the ground, places his closed fist in the iliac fossa, which, from previous observation, he knows to be the habitual seat of pain. Great strength is first needed to overcome the rigidity of the abdominal muscles; but as soon as it is overcome, and the hand feels the resistance afforded by the superior ridge of the pelvis, the resolution of convulsive phenomena begins to take place.

Movements of deglutition, occasionally very noisy, soon appear; consciousness returns; the patient groans and cries, and says that you are hurting her (such is the case with M——); or expresses relief, and thanks you, as G——. At any rate the result is always the same; and if you insist on compression during three or four minutes, you are almost sure to see all the phenomena of the fit vanish. Besides, you may vary the experiment, suspend and resume compression, thus stopping the fit or allowing it to recur, as often as you choose.

When the first resistance invariably offered by the abdominal walls—and which is sometimes very strong—is overcome, you need use no degree of strength, and the application of two fingers to the presumed seat of ovaralgia is enough to produce the desired effect. However, the operation is always fatiguing, especially when carried on for some time, and I have thought of modifying it. A bag of small shot or an appropriate bandage may perhaps serve the purpose. This requires further study; but for the time being all the persons in my wards know how to use compression, and employ it for the patients.

8. It is passing strange that a procedure so undeniably advantageous and of such easy execution has so completely fallen out of use in our days. The treatment is of old date—certainly prior to the sixteenth century. In looking up old authors, I find that Willis (seventeenth century), in his treatise on convulsive diseases, thus expresses himself: "It is certain that convulsive spasms which ascend from the abdomen are arrested and prevented from reaching the neck and head by compressing the abdomen either with the arms or with sheets." ("De Morbis Convulsivis," vol. ii., p. 34.) In another page he relates that he stopped a fit by pressing the two hands strongly on the abdomen.

Mercado, in 1513 ("De Virginum et Viduarum Affectionibus," lib. sec. p. 546), recommended frictions over the abdomen for the purpose of reducing the womb, as he thought. Monardés (his countryman) was more resolute, and used to place a large stone on the abdomen during the fit. The practice, however, did not extend much.

Neither Laz-Rivière nor Hoffman alludes to it. Boerhaave (eighteenth century) insists on compression of the abdomen in hysteric attacks, and recommends a cushion tightened with sheets placed between the false ribs and the iliac ridge. This, he says, was almost sure to relieve the patients, provided the sensation of globulus had not yet got beyond the diaphragm.

In modern times Récamier used to place on the abdomen a cushion, upon which an assistant sat himself. This example was improved upon by Négrier, who recommended "large and strong pressure with the hand on the ovarian region, which is enough in many cases to arrest or suppress completely the convulsive attack."

It is curious and instructive to pass from these regular and scientific procedures to those which were employed in some famous hysterical epidemics by the name of *secours*, or help. Foremost among these we note compression of the abdomen, a means which was probably suggested by one of the convulsionnaires herself; and indeed, as is the case with one of our patients, G——, we see some hysteric sufferers, during the initial pain of aura, instinctively apply ovarian compression. G—— has long been in the habit of doing it; she often succeeds in stopping the fit when it is not too far developed, and when she cannot she asks some assistant to do so for her.

In reviewing the history of celebrated epidemics we find some facts of great interest. Hecker, speaking of the individuals affected with St. John's dance,* says that they complained of great epigastric tenderness, and asked to have the abdomen compressed with napkins. But it is the epidemic of St. Médard, caused by the religious exaltation of the Jansenists, which broke out on the grave of the Deacon of Paris (1727) that furnishes us with important documents. This epidemic presented two distinct periods. The first was remarkable for the cure of a certain number of patients, amongst whom there were undeniable cases of permanent hysteric contraction; the second, for various irregular convulsions, which however did not essentially differ from those of the epidemic form of hysteria. It was at this period that the practice of *secours* appeared in the epidemic of St. Médard. Almost all consisted in some kind of compression exerted on the abdomen. They were very curious: (1) a heavy hand-iron was repeatedly struck against the belly; or (2) a hammer was used instead; or (3) a man with his two closed fists would lean with all his strength on the abdomen of the convulsionnaire, and call other men to help him; or (4) three, four, or five persons would climb on the body of the patient, especially of Sœur Margot, who liked this kind of help; or (5) long bandages were pulled from right to left over the abdomen, so as to compress it. Whatever the mode of administration of this kind of *secours*, it appears to have been always attended with relief.

Necquet, a medical man of that time, did not believe in the supernatural character of these convulsions, which he rightly sought to explain by natural causes. He pretended that "lubricity" led to the practice of all these *secours*. Though I do not ignore what a depraved taste is capable of conceiving, I confess I cannot see what tremendous blows inflicted with a hammer or hand-iron can have to do with lubricity; and I believe it is much more justifiable to think that the *secours* were an empirical practice which produced real amendment in the sufferings of the hysterical patients.

9. You have not failed, gentlemen, to remark the analogies which exist between this arrest of hysteric or hystero-epileptic convulsions determined by compression of the abdomen, and the arrest which is sometimes obtained in convulsions by compression or ligature of limbs. You know that sudden flexion of the foot, as Brown-Séquard has shown, causes the abrupt cessation of the convulsive tremulation of spinal epilepsy observed in various cases of myelitis. Experimental pathology explains these facts to a certain extent. In animals numerous experiments have shown that irritation of the peripheric nerves suspends reflex excitability of the spinal cord. Herzen's experience shows that in a decapitated frog, when the cord is excited in its lower portion, it will be impossible, as long as the excitement lasts, to bring into play the excitability of the upper limbs. Inversely, if with a frog prepared in the same manner you tie the upper limbs strongly with a string, as long as the ligature is on excitement of the lower limbs will not be followed by reflex movements. This is shown by an experiment of Lewisson.

If these phenomena are more easily shown in animals, they are not in the present state of science more easy to explain than corresponding phenomena observed in man.

10. I need not insist, from a practical point of view, on the utility of suppressing a fit of hysteria, or at least of moderating its intensity; this will be brought out still more fully when in another lecture I shall show you the consequences induced by a repetition of the fits, or, in other words, the condition called *mal* hystéro-epileptiquè. For the present I shall thus sum up the following conclusions which result from the day's lecture:—Energetic compression of the ovary exerts no direct influence on the greater part of the permanent symptoms of hysteria, such as contraction, paralysis, hemianæsthesia, &c.; but it has an action which is often decisive on the convulsive attack, diminishing its intensity, and sometimes entirely stopping it.

I shall now conclude by showing the patients chiefly mentioned in my lecture, accompanying the presentation with a few brief words.

CASE 1.—M. ——, aged twenty-three years, hystero-epileptic from the age of sixteen. Cause unknown. Symptoms: hemianæsthesia and ovaria of the left side; frequent vomiting; achromatopsy; characteristic aura preceding attacks; prodromic symptoms proceeding from left ovary; marked cephalic symptoms. The convulsions present three stages: 1, epileptiform, tetaniform convulsions, froth; 2, considerable movements of body and lower limbs; 3, tears, laughter at the end of the fit. In this case compression of the left ovary immediately arrests the attack.

CASE 2.—C——, aged twenty-one. Hysteria came on at fifteen. Probable causes: ill-treatment and prostitution. Marked local symptoms. Hemianæsthesia, ovaralgia, permanent contraction and trembling of lower limbs. Distinct aura, proceeding from ovary and finishing with violent cephalic symptoms. Tonic convulsions with epileptiform phenomena. Attack ceases with movements of pelvis; laryngeal constriction; tears; abundant flow of urine. Compression modifies the fit, but does not stop it.

CASE 3.—Geneviève L——, aged twenty-eight. Hysteric from period of puberty. Hemianæsthesia and ovaralgia of the left side, with a perceptible tumour. Curious mental condition. Well-characterised aura, with palpitation and brain symptoms. Three stages of convulsions:—1. Epileptiform convulsions; froth; stertor. 2. Movements of body and limbs. 3. Delirium. Sometimes she dances about, showing a sporadic and initial specimen, as it were, of the dancing epidemics of the middle ages. It must be remarked that sporadic cases of hysteria show certain convulsive forms which become more violent in epidemics. Compression immediately averts the attacks. She knows it, and uses it herself when she can.

CASE 4.—L——, aged forty-eight years. Menstruation ceased four years ago, yet the attacks continue. The preceding case presented the rudimentary aspect of tarentism, this one shows us a demoniac or *possédée*—one of the jerkers of the Methodist meetings. Etiology: great alarm on three occasions, on one of which she escaped being murdered. Hemianæsthesia, ovaralgia, paresis, and sometimes contraction of right side. The same symptoms sometimes invade the left side. This is a case of double ovaria with double anæsthesia. Marked aura, epileptiform and tetaniform convulsions, and then follow considerable movements having an intentional character, with the most extraordinary attitudes, which recall the postures of the demoniacs. The fit ends with delirium, during which she sees all the frightful events of her past life, and utters loud cries. The fits are followed by hallucinations, paralysis of the bladder, paralysis of the pharynx, and contraction of the tongue. All these phenomena necessitate, during several days, the use of the œsophageal sound for feeding her, and of vesical catheterism. Compression has no effect on the convulsions.

CASE 5.—Hysterical ischuria. Hemianæsthesia, contraction, and ovaria of the left side, with tetaniform attacks. Compression has not yet been employed.

* Danse de St. Jean, at Aix-la-Chapelle, 1374. Epidemic of St. Witt at Strasburg, 1438.

AN EDUCATIONAL DECADE.

THE amount that has been talked and written during the past ten years on the subject of medical education ought to have effected many improvements and reforms, and we think that a comparison of the various schemes of education put forward by the examining bodies this year, when compared with the programmes for the year 1862, will show that, although there is still room for much improvement, we have indeed made considerable and important advances in our methods of teaching and examining.

The recommendations and regulations put forward by the General Medical Council are substantially the same as in 1862, but are much improved by being made more explicit and exact. Thus, for example, the subjects both for the Preliminary Examination in General Knowledge and for the Professional Examination are distinctly set forth. The preliminary examinations are decidedly more severe and searching than they were ten years ago, but the (compulsory) subjects with which they deal are still of such an elementary character that no man we should think can be fit to study medicine unless he is able to obtain at least three-fourths of the maximum number of marks. It seems scarcely credible that ten years ago candidates for the membership of the College of Surgeons were examined only in English grammar, history, and composition, arithmetic (*not including decimals*), the geography of Europe, and one other subject, which the candidate might select from a list of eight, most of which were such as an intelligent junior at a tolerably good school would make light of. By the regulations of the Medical Council the examining bodies are now bound to include among the compulsory subjects at their preliminary examinations, in addition to the subjects mentioned above, decimal fractions, algebra (to simple equations), the first two books of Euclid, and Latin, together with one other subject to be chosen from a list of four. The *junior* local examinations of the Universities of Oxford, Cambridge, and Durham are no longer included in the list of those which render further preliminary examination unnecessary.

In 1862 "four years of professional study" were required of every candidate for a medical diploma. At present the regulation is more exact, and no licence can now be given till after the expiration of forty-eight months from the time of registration as a medical student; and of this time four winter sessions, or three winter and two summer sessions, must be spent at a recognised medical school. Thus, a student who has been the pupil of a workhouse surgeon for eighteen months, entering at a medical school at the beginning of the present session, may finish his curriculum on March 31st, 1875, or exactly two years and a half from the present time (or, deducting vacations, the period of actual study becomes twenty-four months), after which, if he is twenty-one years old, and has been able in so short a time to acquire a knowledge of chemistry, practical chemistry, botany, materia medica, therapeutics, anatomy, practical anatomy, physiology, principles and practice of medicine, clinical medicine, midwifery and obstetric medicine, forensic medicine, toxicology, and morbid anatomy, he may present himself for examination before the board of the Apothecaries' Company and receive a licence to practise.

The Medical Council further sets forth a list of subjects "without a knowledge of which no candidate shall be allowed to obtain a qualification entitling him to be registered." Among these subjects is *surgery*, and yet we fail to find that surgery is among the subjects a knowledge of which is required by the Apothecaries' Company of the candidates for its licence. Among the other subjects in this list are chemistry, midwifery, and forensic medicine, and yet there can be little doubt that many men are licensed to practise by the College of Surgeons who are utterly ignorant of all three of them. It is true that the College requires attendance on courses of lectures on the three subjects mentioned, but it does not apparently think it incumbent on itself to discover whether the horses which it has driven to the water have drunk or not.

Thus it will be seen that the General Medical Council has been moving slowly in the proper direction, and at the present rate of progress some of the younger among us may live to see some of the ideal schemes of education which have been put forward become realities.

Many changes have been introduced in the regulations of the various examining bodies. The University of London, which has always led the way in these matters, has made a few alterations and additions to its scheme of examinations. We notice that "obstetric medicine" now takes the place of "midwifery," a trifling, though proper, alteration in medical nomenclature. Candidates for the degree of M.B. are now obliged to bring proof that they have received instruction in vaccination at the hands of one of the authorised vaccinators of the Privy Council. Two new medical degrees have been instituted by this University since 1862—viz., the *Bachelor* and *Master of Surgery*. For the degree of Doctor of Medicine the examination in logic and moral philosophy is still continued, but the candidates are allowed, if they like, to pass the two parts of the examination (logic and medicine) at different times, and logic no longer counts for honours.

The College of Physicians now examines its candidates for the membership in the principles of public health and psychological medicine, which was not the case ten years ago; and it now obliges all candidates for its licence to have filled the offices of dresser and clerk for three months each.

The examinations for the membership of the College of Surgeons have been very much improved, particularly in the amount of practical study which is demanded of the candidates. Practical physiology, practical surgery, and practical chemistry, have all been added to the subjects, attention to which is required to qualify a candidate for examination. The candidates are further required to have served the office of dresser and to have received three months' instruction under the guidance of a recognised teacher in the observation and examination of patients. Pathological anatomy and demonstrations have also been added to the list of required lectures, and every candidate must have been properly instructed in vaccination. The examinations are much more searching and practical than was the case ten years ago, and no diploma is given unless the candidate shall have satisfied the Council as to his knowledge of medicine as well as surgery. The examination for the Fellowship has been considerably altered, and not altogether for the better. Formerly it was an examination for practitioners who were desirous of devoting themselves especially to surgery; at present it is a students' examination, and runs parallel with the examination for the membership, but on a slightly higher level. The primary examination and the two professional examinations are very similar, and the difficulties are not materially greater for the higher than for the lower diploma. Under the former regulations, the candidate for the fellowship was obliged to devote his attension anew to the study of anatomy and physiology after he had been some years in practice, but we see no reason now why a Fellow of the College of Surgeons should not, under the present regulations, be as ignorant of anatomy and physiology as the most ignorant of its members.

The requirements for the Apothecaries' diploma have been altered by compelling each candidate to have acted as a clinical clerk for six weeks.

NOTES ON EMIGRATION.

THERE are some few categorical particulars relative to emigration that may fitly serve as a prologue to the reports on emigrant ships that we propose to lay before our readers.

The Passenger Amendment Act of 1855, which is still the text-book of the Commissioners of Emigration, enjoins that every statute adult shall have on the "upper passenger deck" of any emigrant ship fifteen clear superficial feet of deck, and on the lower passenger deck eighteen superficial feet. The amount of cubic space is not actually specified, but it is provided that six clear feet in height shall exist from deck to deck (*not* from deck to beam); so that, according to rough calculation, each adult must have at least

ninety cubic feet of space between decks. And it is further provided that every person shall have five superficial feet clear for exercise on the upper deck or poop. Thus much for space. The 26th section of the Act gives to the emigration officers concerned very general instructions as to ventilation, but, as we are informed, further rules and recommendations are laid down by the Commissioners in a special code of instructions drawn up for the guidance of their medical inspectors. It suffices here to say that ports or scuttles, hatchways, windsails, and cylindrical ventilators with movable cowl-heads, have been for many years, and still are, the only means whereby the air is changed between the decks.

The 31st section of the Act is devoted to a general description of the kind, quality, and quantity of provisions and water ordered to be shipped for the use of emigrants, but we have obtained from the Emigration Office a list of all articles required, and the weekly totals for each person are as follows:—(1) Animal food—i.e., beef 16 oz., pork 24 oz., preserved meat 16 oz., suet 6 oz., and butter 6 oz.; (2) bread-stuffs—i.e., biscuit 42 oz., flour 56 oz., oatmeal 16 oz., peas ¾ pint, rice 8 oz.; (3) preserved vegetables—i.e., potatoes 8 oz., carrots 8 oz., and onions 8 oz; (4) groceries—i.e., raisins 8 oz., tea 1 oz., coffee (when roasted) 2 oz., sugar 12 oz., and West India molasses 8 oz. Three quarts of water are allowed daily, "which is, as far as possible, to be distilled water," and the ship's surgeon may issue a larger allowance in the tropics "provided the supply will admit of it." Pickles, mustard, salt, and pepper are also issued, and lime-juice, "out of the tropics, may be issued or not, at the discretion of the surgeon." The medical comforts are vast in their variety, and include, among other things, yellow soap, "approved" stout, Braham's "excelsior" soap, oatmeal grits, and quicklime. The medicine chest is furnished according to a scale provided by the Commissioners, which need not be particularised in this place, although it is, according to reports that we have lately received, a fruitful source of perplexity to druggists who are called upon to provide the requisite articles.

The 38th and 39th sections provide for the carrying of a passenger steward and passenger cooks, but no stewardess is mentioned. The 41st section enjoins that a surgeon shall be carried if more than eighty days are occupied on the voyage in the case of sailing-vessels, or more than forty-five days in the case of steamships, the number of passengers on board exceeding fifty, and also in any case whenever the number of persons on board (including passengers, officers, and crew) exceeds three hundred.

We have here recapitulated as briefly as possible those points of the law bearing specially on the subject on which we are about to report, and, for obvious reasons, abstain at present from any sort of criticism thereupon. No less than 571 private passenger ships left the ports of the United Kingdom last year under the superintendence of Government emigration officers, as well as three vessels that were chartered by the Emigration Commissioners. These ships carried (including crew and passengers) 281,317 persons, and, as we take it, there are sufficient means placed at our disposal to decide, (1) whether the emigration laws are proper and sufficient in a sanitary point of view; (2) whether the emigration officers exercise their powers fully and faithfully; (3) whether the shipowners treat their living freights liberally, scurvily, or according to the exact letter of the law.

LONDON WATER.

REGULATIONS UNDER THE "METROPOLIS WATER ACT," 1871.

THE new regulations consist of 33 clauses, the 33rd being a saving clause as regards existing fittings, and runs as under:—"All existing fittings which shall be sound and efficient, and are not required to be removed or altered under these regulations, shall be deemed to be prescribed fittings under the Metropolis Water Act, 1871."

Clauses 14 and 15 require waste-pipes and overflow-pipes to be disconnected from drains. This will be a great sanitary improvement, as it will prevent such pipes conducting, as now, sewer gases to the water in tanks and cisterns, where these are used.

Clause 18 merely provides that draw-taps in new houses shall be sound, and of the "screw-down" kind.

The weight of lead-pipes prescribed in Clause 2 is much less than the weights sought to be dictated and enforced by the companies.

It was proposed by the companies to supply water through a restricting ferrule, having diameters from 1-10th to 1-24th of an inch, this mode of supply being partially in use in the East London Waterworks at present. It was also proposed by the companies to compel the use of a patented self-closing house-service tap, costing 10s. 6d.

Foreign Gleanings.

INTERSTITIAL PNEUMONIA ACCOMPANYING PLEURISY.

IN a recent communication to the Société Médicale des Hôpitaux on the above subject, Dr. Brouardel summed up his views and experience by directing the attention of his colleagues to the following three points:—1. The very rapid formation of interstitial pneumonia and of false membranes, which reduce the size of the lung and form an obstacle to its expansibility, and consequently the innocuity of early thoracentesis and the gravity of late thoracentesis. 2. The possibility of hæmorrhage after thoracentesis when practised by means of the aspirating apparatus, which perhaps may be explained by the fact that the exhaustion of liquid has been carried too far. 3. The real or pretended gravity of these intrapleural hæmorrhages.

TRAUMATIC JAUNDICE.

Professor Verneuil, of Paris, in a paper recently read to the Academy of Medicine, sets down the following conclusions in connexion with traumatic jaundice:—1. Jaundice may supervene after a traumatic lesion bearing upon the liver itself or some other organ more or less distant from the liver. 2. In the first case it is traumatic jaundice, properly called a direct jaundice; in the second, indirect traumatic jaundice. 3. This last sort includes two varieties, clearly distinguished by the causes, course, prognosis, and pathogeny of the disease. 4. The first variety, or pyohæmic jaundice, is a symptom of purulent infection, and is caused by septicæmic alteration of the blood, with or without metastatic gatherings; the second, or reflex non-pyohæmic jaundice, is due, without doubt, to a perversion of the nervous action. 5. Direct traumatic icterus and pyohæmic icterus do not imply any previous alteration of the liver. On the contrary, an anterior organic lesion of this gland seems to be a necessary predisposing condition to the production of reflex traumatic icterus. 6. The diagnosis between the three varieties is often easy. For the first, it is enough to state the direct or indirect lesion of the liver. For the second, there exists the symptomatic accompaniment of pyohæmia. For the third, the circulatory system and the thermometer must be consulted. 7. Though the prognosis of icterus consequent upon wounds is a serious one generally, yet it varies much according to the nature of the complication. The gravity of direct traumatic icterus will depend upon the disturbance brought on in the liver by the wound. Reflex icterus seems benign enough, except in those cases where the anterior lesion of the liver is of a serious character. 9. Reflex icterus does not seem to modify unfavourably the course of the healing process of the wound. 10. Reflex jaundice belongs to the great class of distant traumatic "deuteropathies." It constitutes one of the rarest forms of this class of disease, if we are to judge from the limited number of cases on record.

CONVULSIVE PHENOMENA IN DISEASES OF THE SPINAL CORD.

In an interesting monograph devoted to the above subject, Dr. Hallopeau, of Paris, thus sums up various suggestions for treatment:—1. Oppose the transmission of centripetal excitation (especially by means of sulphate of atropia). 2. Oppose the transmission of centripetal irritation (by constant electric currents, as recommended by Mendel). 3. Lower the excito-motor power of the cord (bromide of potassium, ergot of rye, and the ether spray along the spine).

THE LANCET.

LONDON: SATURDAY, OCTOBER 5, 1872.

THE Introductory Addresses of the new session have presented but little divergence from their time-honoured and familiar characters. In all of them the students have been duly warned that art is long and life is fleeting; in all they have been urged to be diligent in the wards and in the dissecting room, and to be constant in their presence in the lecture theatre; in all they have been told of the terrible consequences, both to themselves and to their future patients, which may result from any neglect to use the opportunities now opening before them. All these statements are very good and true; and, although to adult ears they seem so obvious as to be scarcely worth saying, it is yet quite possible that they may furnish good seed for the youthful mind, and that they may become impressed, by forcible repetition on the 1st of October, upon some who might otherwise have been only imperfectly conscious of them. The chief exceptions to the ordinary introductories have been furnished at University College, by Mr. CHRISTOPHER HEATH, and at the London Hospital, by Mr. JONATHAN HUTCHINSON. The former gentleman, in the course of an address which we print in full, and which is generally remarkable for its practical, friendly, and colloquial character, boldly impugned the wisdom of the present system of examinations for medical degrees in the University of London; the latter fed his hearers with some rather abstruse physiological speculations, and founded a new motive for the discharge of duty upon the presumed personal continuity between a man and his offspring.

With Mr. CHRISTOPHER HEATH'S complaint we at once profess the most entire and absolute sympathy. We have long ago expressed the opinion that the Matriculation examination of the University is one that no boy of sixteen could pass if he had been educated, as contradistinguished from being crammed; and for which he could not be crammed without some injury being done to the higher faculties of his mind, to his powers of observation and reflection, as distinguished from his powers of retaining the subject matter of manuals, or the "views" of examiners, in a terse and presentable form. The University professes to aim at the highest attainable medical education, and especially at educating the teachers of the profession; and it sets about this task by requiring the practical abandonment of medical study for a considerable time, in order that candidates may qualify themselves to answer such questions as that which Mr. HEATH has quoted, and which, in its relation to medical requirements, is as absurd on the face of it as it could be made to appear by any amplitude of statement. To this we may add that the University permits its medical graduates to remain, if it so pleases them, wholly unacquainted with certain important branches of professional knowledge; and that it seems altogether to confound the liberal education that should precede medical studies with those studies themselves. The University has now for some years enjoyed a reputation which has been very largely based on the great and increasing numbers of those who have failed to satisfy its tests, and on this account its graduates have found ready access to professional positions of honour and responsibility. The time cannot be far distant at which the value of the degrees will come to be judged by an impartial estimate of what these graduates, as a body, and as compared with others having equal advantages, have done for the advancement of knowledge and the promotion of medical science; and the question will be raised whether, after all, the number of rejections may not be a measure of the injudiciousness of the curriculum and of the unreasonable requirements of the examiners. Mr. HEATH tells us that a sub-committee of Convocation has already reported strongly against the system which he condemns; and we trust the University authorities will see cause to reconsider the line of action they have pursued, and to retrace steps which seem likely to lead them away from the intellectual atmosphere of London, and to tend somewhat in the direction of Laputa.

IN March last, at the end of the session of the Medical Council, we had to report that the Conjoint Schemes were *in nubibus*, and likely to remain there. Up to this time our description of the *locale* of these schemes in March is still quite applicable. Our readers will remember that, on the failure of the Scotch bodies to agree on a Conjoint Scheme, in March last, the General Medical Council resolved, on the motion of Sir WM. GULL,—

"That this Council expresses its regret that no scheme has been framed and submitted by the medical authorities of Scotland for the establishment of a Conjoint Board of Examination."

The Council further resolved, on the motion of Sir WM. GULL,—

"That a notice of the last resolution," just given, "be sent to the medical authorities of Scotland, together with a statement that the Council still urges upon them the desirability of a Conjoint Examination; and expresses the hope that a scheme for such an examination as the Council can sanction may be submitted to the Council by July 1st, 1872."

A similar resolution was then passed, after a short debate, with reference to the medical authorities in Ireland.

July has come and gone. The summer holidays are over, and all the grave work of medical education is commencing with the beginning of October. Yet no sign is given of a meeting of the Medical Council to settle this most important and disturbing question. From all we can learn, there is no probability that the Medical Council will meet again this year. We can only infer from this fact that no progress has been made in the preparation of Conjoint Schemes such as the Council could for a moment give its sanction to. It is now becoming clear to everybody, as it has been clear to us throughout, that there is no reasonable chance of the medical corporations agreeing to schemes which could be entertained as providing one complete and satisfactory examination for general practitioners. The prospect of such a consummation is even less promising than it was in March last.

In Scotland there has been further attempt and more complete failure. In Ireland the Queen's University continues to hold aloof, and it grants a very large number of attractive degrees. And even in England, where more public spirit had been manifested by the bodies concerned than in the sister divisions of the kingdom, the last that was heard of the Conjoint Scheme, and the way in which it is to be worked, alienated some of its best friends, and satisfied all earnest critics that it was not a scheme that could permanently command the confidence even of the Colleges which were to be principally represented in it, to say nothing of the profession at large or of the public.

The question then is, what is to be done? Is the Council to go on for two or three years more spending a week at a time in formulating resolutions averring the desirableness of conjoint schemes? Clearly not. This proceeding could not be repeated even once more without becoming farcical. Even the Scotch and Irish members must have come to the conclusion that a knot which cannot be loosed must be cut, and that what the medical bodies cannot do for the profession must be done by Parliament.

One thing, at any rate, is clear—that, if another meeting of the Council takes place without the announcement of any practical and complete schemes being agreed to by the various bodies, these bodies must be prepared to stand aside and allow Examining Boards to be formed with reference chiefly to the public interests. It will then be palpable that, if nineteen bodies cannot agree to form boards, they cannot agree sufficiently to be trusted to work them. In other words, the clear course for the Government will be to leave the nineteen bodies alone in their independence, to grant their diplomas as at present, but to constitute an independent Examining Board, subject to the authority of a General Medical Council, whose licence alone shall be a legal and complete qualification for practice, the possession of which shall be required in all candidates for the diplomas or degrees of the various medical bodies.

EVIDENCE appears to be accumulating showing that some at least of the changes which take place in the various secretions of the body, under the influence of different drugs and remedial agents, are due to or associated with changes taking place in the blood-corpuscles. The papers of MM. BINZ and GELTOWSKY, which have lately appeared in the *Practitioner*, upon the action of quinine on the white corpuscles of the blood, supply important evidence upon this point; for they show that, when added in comparatively small proportions, quinine arrests the amœboid movements these corpuscles are capable of performing, and probably have a powerful influence in checking their development and multiplication in the lymphatic and vascular glands.

The experiments of M. RITTER, of which an abstract is given in a late number of the *Revue des Cours Scientifiques*, point in the same direction. M. RITTER seeks to show what chemical modifications are produced in the different secretions, and especially in the urine, by the introduction into the system of certain agents known to have an action on the blood-globules. The substances with which he experimented were oxygen, nitrous oxide, carbonic oxide, the salts of antimony and arsenic, phosphorus, and the soda salts of the biliary acids.

It might naturally be anticipated that the inhalation of oxygen would increase the activity of the combustion of organic compounds, and consequently augment the proportion of the compounds representing the ultimate results of that combustion contained in the urine. But, as if to show the unsatisfactory character of mere theory in explaining vital processes, the experiments of M. RITTER demonstrate that the inhalation of oxygen renders the urine more acid and increases the proportion of ammoniacal salts; and though it increases also the proportion of urea, as compared with the uric acid, it diminishes the absolute amount of urea, as well as the total quantity of nitrogen discharged by that fluid. A possible explanation of this is that a portion of the urea may be decomposed in the blood into water, carbonic acid, and nitrogen, which are eliminated by the lungs; and this is in accordance with the statements of ALLEN and PEPYS, as well as those of REGNAULT and REISET, that rather more nitrogen is eliminated in the expired air by an animal that has been made to breathe pure oxygen than under ordinary circumstances. The greater acidity of the urine appears to be due to the presence of an organic acid, that M. RITTER believes is lactic acid, which it is known may proceed from the oxidation of nitrogenised substances. Muscular activity acts in nearly the same manner as inhalation of oxygen.

Before determining the action of *protoxide of nitrogen* on the urine M. RITTER investigated its influence on the blood, and shows that this gas is dissolved by the blood in larger quantity than by the serum destitute of globules, but that all the gases—even carbonic acid and hydrogen—displace it easily, whilst its oxidising power is certainly feeble. On respiring protoxide of nitrogen, or drinking water charged with it, the quantity of carbonic acid expired diminishes; and in regard to the urine, the amount of urea, of uric acid, and of nitrogenised compounds generally, is augmented, but only in proportion to the amount of urine eliminated, which is itself increased. In fact, this gas produces diuresis.

The experiments of CLAUDE BERNARD have demonstrated that *oxide of carbon* deprives the blood-globules of their power of absorbing oxygen. On *à priori* grounds, therefore, the introduction of this gas into the system ought to check oxidation; and, in accordance with this, M. RITTER finds that after non-poisonous inhalations of carbonic oxide there is a constant diminution of urea and of the total nitrogen, and that there is especially a diminution in the proportion of urea to the total nitrogen.

The compounds of *antimony*, *arsenic*, and *phosphorus*, introduced into the body, occasion a diminution in the quantity of urea and of the total quantity of nitrogen; and, although there is an increase in the amount of uric acid, the urine is alkaline. The compounds of these metals or metalloids, taken in larger doses, cause disintegration of the globules and the formation of hæmoglobin crystals. The urine then contains albumen, colouring matter, bile, &c. If less doses be given, an increase of fat and of cholesterine is found in the blood and throughout the system. They are thus shown to be deoxidising agents.

As regards the biliary acids, M. RITTER states that the

taurocholate of soda, injected directly into the blood, has an action analogous to that of phosphorus, but less energetic.

So far as they go, these experiments are interesting, and open up a wide field of inquiry, which may perhaps enable us to explain the action of many drugs which are at present shrouded in mystery.

A GRAVE outbreak of cholera in Upper Nubia, of which the news has just reached us, has a twofold interest at the present time. First, as of most immediate moment, the outbreak endangers the expeditionary force under the command of Sir SAMUEL BAKER. Next, it forbids the too ready assumption that Western Europe is free from the danger of an extension of the disease during the existing diffusion—an assumption which latterly has appeared to be almost justified by the presence of the malady in Eastern Europe and its apparent cessation in Arabia.

The facts of the outbreak, so far as they are yet known, are as follows. In July cholera appeared among a body of Turkish troops in the district between Sonakin and Berber. The outbreak was so malignant that of a total of 300 deaths at the time of the latest report 200 had occurred within two days. The diffusiveness of the disease is stated to have been as great as its malignancy. It had extended to Berber and attacked the Arab tribes in the neighbouring districts, and it was spreading southwards along the course of the Nile. With a view of preventing the westward and southward spread of the pestilence, sanitary cordons were to be established at Khartoom and elsewhere, but doubts are entertained whether the action of the authorities has not been rendered futile by the rapid progress of the malady.

The disease is stated to have been introduced into Nubia from Hodeida, by way of Sonakin; and it is highly probable that the outbreak is an extension of that which occurred in the Hedjaz at the close of the past and commencement of the present year. Egyptian sanitary authorities believe that Lower Egypt was saved from infection during this outbreak by the efficiency of the quarantine arrangements which it adopted against the Hedjaz, and which are now in force both against the Hedjaz and against the ports of Nubia and Upper Egypt. The danger to Egypt from the present outbreak of cholera in Nubia is considerable; and so long as Egypt is seriously threatened, having regard to the experience of 1865, it would be unwise for Southern Europe to lull itself into a foolish security.

Happily, during the summer and autumn, the cholera existing in Europe has shown but little diffusiveness. There have been slight extensions of the disease in Gallicia, Roumania, and Hungary. It has spread slowly also eastwards along the north coast of the Black Sea and Sea of Azov. Recently, moreover, the disease has appeared at Gefle, in Sweden; and it still lingers in St. Petersburg. These facts, although reassuring as to Westward Europe during the present year, show a tenacity of the malady in certain districts of the continent which must still beget anxiety. Further, the activity of the epidemic in Nubia cannot be rightly considered without having regard to the recent alarming outbreaks of cholera in the North-Western provinces of India. Western Europe and this country will still act wisely for several months to come by maintaining a state of preparedness against possible inroads of this pestilence.

A CORRESPONDENCE has lately appeared in *The Times*, on the subject of "Hospitable Hospitals," originated by a gentleman who recounted the care and kind treatment that he, an Englishman, unacquainted with continental languages, received in the public hospital at Bâle. He relates that, while travelling, he was seized with severe illness at his hotel; and that the doctor called to him recommended his removal to the hospital. He was there accommodated with a private room, and, as far as we follow his account, was still attended professionally by the doctor who first saw him, and who had suggested his change of quarters. He remained at the hospital a fortnight, and the entire cost to him was four guineas. He wishes to know whether a foreigner in this country would find similar accommodation; and thinks that, if not, some such provision ought to be made for their necessities. The secretary to the London Fever Hospital then writes to say that there are private rooms for paying patients at that institution; and a correspondent, who signs himself "One also grateful," gives an interesting history of the care and kindness bestowed upon his wife, during her last illness, in a private room at a London hospital that is left unnamed.

It is very easy, of course, to indulge in philanthropic speculations on the subject of the abstractedly desirable; but before doing so it is worth while to reflect on the totally different meanings which attach to the word "hospital" in England and on the continent. The hospital in England, supported by voluntary contributions, for the care and treatment of the sick poor, would be entering upon an entirely new field of work if it were to attempt—save under exceptional conditions, such as accident or sudden illness in a thoroughfare—the treatment of those who were sick but not poor. Moreover, this new field is one that could not be undertaken by unpaid medical officers. The analogue to the Bâle Hospital must be sought in the English workhouse infirmary, an institution supported by public funds and under the care of paid doctors. There could be no harm, and indeed there would be much benefit, if the workhouse infirmaries had private rooms attached to them for the reception on payment of bachelor lodgers and other suitable persons during sickness; and not the least part of the benefit would arise from the enhanced interest that the public would take in the general condition and management of the establishments. We fear that a Swiss gentleman sick in England would hardly bestow upon Farnham or St. Pancras the praise which the correspondent of *The Times* gives to the hospital of which he became an inmate; but if these famous health-resorts were liable to be used by persons above pauperism, there can be no doubt that they would be likely to undergo many important changes. It would be a laudable ambition for Mr. STANSFELD to seek to characterise his administration by such a reform of workhouse infirmaries as would conduce to this result, and we cordially commend the matter to his early and earnest attention. It would also be a wholesome exercise for his newly-appointed legal inspectors if they

were called upon to draw up a report on the alterations which would be required in an ordinary infirmary, before it would be calculated to place the sick in the conditions most favourable to their recovery.

Medical Annotations.

"Ne quid nimis."

CUTANEOUS ABSORPTION.

IN the *Moniteur Scientifique* for September, M. Papillon gives a sketch of what has recently been done on this subject, from which we take the following summary. has long been well known that liquid substances and essences are readily absorbed by the skin. The question as regards solids is more difficult, and has given rise to much discussion.

M. Roussin, of Val-de-Grâce, maintained some years ago that alkaline iodides could be absorbed by the skin if incorporated with fatty matters. From baths containing these salts he found no absorption, but if the skin was rubbed with a pomatum containing them, iodine was afterwards found in the urine. A dry shirt, which had previously been dipped in a solution of iodide of potassium, occasioned absorption in the wearer; but M. Roussin explained this by saying that a pomatum of iodide was really formed with the fatty matters of the skin.

M. Rabuteau vigorously refuted these conclusions. He pointed out that in both cases, of the iodised pomatum and of the shirt, iodine was set at liberty. The salt was decomposed by ozone and by the acids of the perspiration, and iodine was absorbed in the state of vapour. The proof that fatty matters had no part in the phenomenon was, that if the pomatum was prepared with bromides, which are less easily decomposed than iodides, there was no absorption, no bromine found in the urine. Further, M. Rabuteau found no trace of iodine in the excreta, after remaining more than an hour in a bath containing 100 to 150 grammes of iodide of potassium; nor any absorption when a like experiment was made with bromide of potassium or sodium. But taking a bath in which he had put a solution containing 50 grammes of bromide of potassium and 5 grammes of iodine, he afterwards found iodine in the urine and saliva. The iodine, in a state of vapour, had been absorbed by the skin.

It is known, moreover, that many substances, very dangerous, but not volatile—such as bichloride of mercury, digitaline, &c.,—in a state of solution in a bath, have no hurtful action on those who take such baths. Doubtless an absorption commences in course of time, but it is very small, and only when the skin has become well impregnated, as the experiments of MM. Rabuteau, Reveil, Homolle, and others prove.

While a bath containing a considerable quantity of corrosive sublimate does not excite any action, simple friction with a mercurial unguent, on the other hand, produces absorption largely and readily, followed by the symptoms of hydrargyrism, salivation, &c. This is due to the fact that while the sublimate is a fixed salt, metallic mercury is a volatile substance, giving off vapours at all temperatures. M. Merget's recent experiments have thrown new light on this extraordinary and subtle volatility of mercury, and furnish at the same time a very delicate means of detecting the smallest quantities of this metal. The subject is at present being prosecuted by an able Paris pharmacist, M. Byasson.

It seems, then, to be established that volatile substances are always absorbed, immediately and largely, by the external tegument, in the state of vapour; also, that fixed substances are absorbed very little, and only after a long time; but when, through decomposition or contact with the skin, they give rise to volatile substances, the latter are immediately absorbed.

VENTILATION OF SHIPS.

THIS subject is so very *apropos* to a series of reports which are now engaging our special attention, that we are glad to notice a system proposed for the ventilation of ships that has been very recently introduced into this country from the United States. The apparatus is called Thiers' Patent Automatic Ship Ventilator, Fog Alarm, and Bilge-pump, and Mr. Roddy, of New York, is now, by permission of the Lords of the Admiralty, engaged in fitting it on board H.M.S. *Vigilant*, now lying at Plymouth. The primary object of the plan is to remove all bilge-water as fast as it collects at the bottom of the vessel, and to ventilate the hold, the 'tween decks, or any other part of the ship by expelling the foul air. The inventor proposes to effect both objects by placing two tanks or cylinders on each side of the vessel, immediately opposite each other, each pair being connected by a pipe running under the deck. One of these transverse pipes is filled with water and the other with mercury. The tanks connected by the water-tube are furnished below with pipes that lead into the hold, and above with pipes that open into the air above the ship's bulwarks. Each of these tubes is guarded by a valve opening upwards. When the vessel is in motion an inclination of some sort always exists, which, however slight, creates a vacuum in one of the tanks, which tank is immediately occupied by air from the hold, and the next change of movement on the part of the ship forces the water from the transverse pipe back into the tank, and of course the air through the upper pipe into open space. The tanks connected by the tube filled with mercury act in precisely the same way as to the bilge-water, so that the principle is in all respects automatic, and is continually in action except when the vessel is strictly at rest.

The Fog Alarm is a simple apparatus attached to the end of the air-tube on deck, but that has nothing to do with the sanitary aspect of the question.

We are not prepared to discuss the merits of this system. It has been favourably reported on by the authorities of the United States' Navy, and we are informed that a large proportion of their ships are fitted with the apparatus. We shall await with interest the official report of the Medical Director-General of the Navy on its merits; for there can be little doubt that if the principle enunciated can be successfully carried out, its application would be a very great boon to emigrants at sea.

FACIAL CARBUNCLE.

IN our obituary columns reference is made to the death of a young and accomplished medical officer of the Foot Guards from this affection. The disease is happily a rare one, but still sufficiently common to have attracted the attention from time to time of several surgical authorities in this country and on the continent. Its importance leads us to make a few remarks. There is no means of distinguishing, in the initial stages, between the simple and benign kinds of furunculoid inflammation of the face, and that highly dangerous and often fatal form to which we are now referring. The affection commences most frequently by far, but not exclusively, in the neighbourhood of the upper lip, as a vesicle or pimple which, in the course of a few days, from solid œdema, develops into a large dusky-red induration. Its growth is attended with extreme pain, and leads to great deformity of the features. The

areolar tissue becomes disintegrated, and, as in ordinary carbuncle, pus is also a product in an advanced state of the disease. A short and clear account of facial carbuncle, from the pen of Mr. Thomas Smith, is contained in the fifth volume of Holmes's System of Surgery. One of the earliest writers in this country to call attention to it was Mr. Harvey Ludlow, who, in common with others that saw some of the cases which he described, decided against the disease being malignant pustule or charbon, from which it differs in several very important features—as, for instance, in the pain and suppuration attending its progress, as well as in the nature of the morbid changes of the part affected. Constitutional symptoms of a low type commonly manifest themselves in the course of a few days, and often very unexpectedly, and out of all proportion to the local disease. Rigors, fever, and other manifestations of pyæmic infection are the precursors and cause of the fatality of carbuncle in this part; and it forms an interesting subject of inquiry whether there are any anatomical or other reasons which can account for their occurrence. Güntner, in describing some cases of carbuncle of the face, remarks that the short, stiff, connective tissue of the lips, nose, and septum narium specially favours the early occurrence of thrombosis. Be this as it may, the connexion of the facial vein with the ophthalmic and jugular veins, and the great vascularity of the part, offer facilities for the introduction of any infective materials into the cerebral sinuses and general circulation. In a case that came within our observation many years ago the initial manifestation of the disease was an irritable-looking pimple on the left side of the upper lip. This was followed by œdematous swelling of an erysipelatous character. Rigors and constitutional symptoms of a febrile type appeared, with chemosis and protrusion of one eyeball from an intra-orbital abscess, acute pulmonary disease, paralysis of upper extremity, and much swelling of one side of the neck. A post-mortem examination discovered pus in the orbit, and a puriform matter in the ophthalmic vein and cavernous sinus and internal jugular vein, with softening of the cerebral substance and pneumonia. The patient was a young married woman, living in a healthy position, and no cause could be discovered to which the occurrence of the disease could be attributed.

BERBERIS VULGARIS.

AGUE, malaria, and all kindred affections, cause enlargement of the spleen, and, if frequently recurrent or protracted in their course, enlargement of the liver also. Piorry, professor of pathology at Paris for nearly forty years, showed by a series of measurements that febrifugal remedies act as such upon fevers by reducing the spleen and all the other (sympathetically) enlarged viscera to the normal dimensions. Full accounts of these measurements will be found in Piorry's "Traité de Médecine Pratique," tome vi., and "Traité de Diagnostic et de Semeiologie," Paris, 1837. Quinine had been recognised as possessing this reducing agency by Bally, Piorry's master, fifty years ago; but it was reserved for the pupil to show that the same virtue resides in the "berberis vulgaris," or common barberry, an *échantillon* of which plant, pharmaceutically prepared, had been given him by a chemist of Lyons. Piorry came to prefer this preparation in the treatment of miasmatic fever to quinine; indeed, whenever he found the spleen enlarged in a patient suffering from ague, intermittent, or hectic, he gave (as one of his pupils and clinical clerks, Dr. L. M. Klein, tells us) berberis instead of quinine, and the fever abated in a few hours. From comparative experiments of both febrifuges, Piorry convinced himself that in well-recognised cases of ague and miasmatic fevers berberis vulgaris was the superior remedy. He sent Dr. Klein to Algeria to institute further experiments, and the result was strongly confirmatory of Piorry's practice, which the physicians of the colony have subsequently adopted. In the present dearness, not to say dearth, of quinine in India, why not (asks Dr. Klein) give berberis a trial? The plant is a most accessible one, very common in almost every rocky upland in Europe, Asia, and America. Till scientifically demonstrated by Piorry, its febrifugal virtues were known, even empirically, only to comparatively few physicians, and those mainly in France, Northern Italy, and Switzerland. In this country they are not unknown, but the knowledge is neither very precise nor of much practical force. Certainly a clear case has been made out for its experimental trial by the Indian Government, and by those others, European or tropical, where febrifuges of the more expensive, but seemingly not more efficacious, kind are in constant use.

CHOLERA IN THE EAST.

Apropos of the outbreak of cholera among our troops at various stations in India, it may be well for us to fix our minds upon a few facts which seem to be established and to be unmixed with fancies. While the attacks of cholera among European troops stood at 89·20 per 1000, those of the native troops were only 9·56 per 1000 at the same stations and dates; and similarly, while the death-rate among European troops was 53·68, it was but 4·11 per 1000 among the natives. Now, the natives live separately in huts; the Europeans live together in barracks. Again, to show that the relative immunity of the native troops in cantonments is attributable to this subdivision rather than to any physiological peculiarity of race, there is the significant fact that whenever they are crowded together on board boats on the Ganges their susceptibility to, and mortality from, cholera are quite equal to those of Europeans in barracks. Another fact is that, spite of magnificent and lofty barracks, soldiers suffer more in the way of constitutional deterioration of health and susceptibility to epidemic disease in the plains than on the hills of India; and, further, that residence in some of the stations in the plains is very inimical to health, without any very preponderating advantage being gained in a military or strategical point of view. Lastly, few places have suffered more severely than Meean Meer from cholera. In 1856 no less than 16¼ per cent. of the troops died there from cholera. In 1861 24¼ per cent. died. Up to that time, we believe, wells and cesspits were dug in the same subsoil of that station. The cesspits were emptied and filled up, and their use was discontinued. In 1862 and 1867 respectively there were epidemics of cholera at the station, with a death-rate of 5 per cent. At the present time it is alleged that, even if the source of the drinking-water were unexceptionable, the position of the wells and the means for drawing and distributing the water present so many elements of danger of its pollution. Apart from any hypothesis as to the causes affecting the origin and spread of cholera, it seems to us that here are three very suggestive directions in which practical sanitarians might strive to effect something.

MISDEMEANOUR UNDER THE LUNACY ACT.

IT is to be hoped that the case of Mr. Alexander Ogilvie will serve as a warning to unqualified persons not to assume the functions, still less the titles, of qualified practitioners, especially in such a serious matter as that of consigning an unfortunate patient to a lunatic asylum. Mr. Ogilvie was called to attend an insane patient, and he did attend him. Then he undertook to sign one of the certificates of lunacy, signing himself Alexander Ogilvie, Surgeon R.N., 1830. On this certificate being forwarded to the Commissioners in

Lunacy, it was returned to Mr. Ogilvie, in consequence of his not being registered. He then made matters very bad by adding to his name M.D. St. Andrews, 1820. Further inquiries showed that he had no legal qualification whatever; and Dr. Stocker was obliged to discharge the patient immediately. Much comment on such facts as these would be superfluous. It is bad enough that a man should practise without any qualification, but it is worse that he should throw dust in the eyes of the public by calling himself Surgeon R.N., and worse still that he should appropriate the degree of St. Andrews by a stroke of the pen, in order to give colour to a certificate of lunacy. The Commissioners would have been very much at fault if they had not prosecuted in such a case. We have great respect for Mr. Justice Lush, before whom the case was tried, but we cannot understand his saying that the defendant in what he had done was entirely free from moral blame. It was, perhaps, merely a breach of law for an unregistered man to sign a lunacy certificate, but for an unqualified man to say that he was a graduate of St. Andrews was what we should call a decided breach of morals.

THE FOUNDLING HOSPITAL AT ST. PETERSBURG.

THERE are few so bad that a retrospective view of their lives will not show one redeeming virtue—one oasis of that quality "which droppeth as the gentle dew" amid a barren expanse of selfishness and evil-doing. The Empress Catherine of Russia was doubtless a woman whose life presented blemishes and scandals of a kind that would ostracise their possessor from the pale of modern society; but it is satisfactory to note one gracious and noble act of her reign—a bright gem in a not unsullied crown—with which her name will ever be associated. We allude to the Foundling Hospital at St. Petersburg, which she founded in 1772, and which has just completed its centenary. This institution has for years been gathering in usefulness and scope, and there are now seventy-three schools and numerous village *crèches* working in connexion with it. Its register contains the names of 25,000 children admitted within its widely embracing operations, and there are at present 2000 children receiving primary instruction. A college has been established in the capital for the education of teachers, who, when required, are drafted off to the various country branches, all of which anastomose with each other and the central institution. And an asylum has been established at Grysof, where children from three to seven years of age are received, no restriction as to parentage or locality being enforced. It is pleasing to contemplate the great strides which this vast empire is making in all the humanising agencies of modern civilisation. That great event in Russian history—the abolition of serfdom—sowed a seed which already appears to bear fruit. The coarse Napoleonic *mot* may be paraphrased into "Remove the rust of prejudice and ignorance, and you will find sterling metal underneath."

JUVENILE SMOKING.

WHATEVER opinions may be entertained as to the effects of moderate tobacco-smoking on the adult, there can be none as to its deleterious influence on the boy. The molecular changes coincident with development of tissue are interfered with, slowed, if not arrested by tobacco. Take the blood-corpuscles, for example, and see how the narcotic affects them. According to German physiologists, they lose their round shape and become oval and irregular at their edges; while instead of mutually attracting each other, and running together in *roulcaux*—a good sign,—they cohere loosely, or lie scattered on the field of the microscope—a bad one. The physical effects are paralleled by the psychical ones. M. Bertillon found that of the pupils attending the Polytechnic at Paris, 102 smoked, while 58 did not. Arranging the two categories in the order of merit, according to the results of the examinations, he found the non-smokers held, in every grade, the higher rank; and that the smokers, as compared with the non-smokers, deteriorated from their entering to their leaving the school. Facts like these induced the Minister of Public Instruction, in 1861, to issue to the directors of colleges and schools throughout the empire a circular forbidding tobacco to the students, on the ground "that the physical as well as the intellectual development of many youths has been checked by its use." In Germany, where at so many schools the Bursch's ideal may be summed up in Goethe's lines—

> "Ein starkes Bier, ein beizender Taback,
> Und eine Magd im Puss, nun das ist mein Geschmack,"

the premature smoking of tobacco would, but for the superior stamina of the race, prove not less disastrous. As it is, tobacco amaurosis is an ophthalmic affection quite recognised by German physicians as having its origin at school and college. Amongst ourselves juvenile smoking is getting more and more common, with the result of impaired eyesight, thinning of the hair, and other symptoms of excessive draughts on the trophic nerve centres. And how is the practice to be stopped when it is directly encouraged—even Sunday-school prizes taking the form of meerschaum pipes? Not till education instructs the youth of the country in the fabric and functions of the body, makes them cognisant of the conditions of health, and inspires them with a manlier ideal than that of merely aping the manners of their elders, will premature indulgence of every kind cease to act on them for evil.

A SANITARY PASHA.

M. E. LITTRÉ, well-known not only in philosophical but medical circles for his edition and translation of Hippocrates, his masterly dictionary of medico-scientific terms, and his large-minded work entitled "Médecine et Médecins," has found a sanitary paradise where the world in general, and he in particular, would least expect to find it—in Syria! Thanks to the wise and energetic Governor-General of that pashalik, the Damascus as known to M. Littré twelve years ago is a totally different place from the Damascus as now described by that *savant*. In those days it was undrained, fever-stricken, and plague-haunted. The absence of lights or police after sunset left the narrow streets—unpaved and unscavenged—to be patrolled by thieves. The butchers killed their cattle before their shops, flinging the offal to the dogs, and leaving the blood to settle in stagnant pools. The centre of the city was occupied by a powder-magazine quite uncared for. With the promotion of Soubhi Pasha to the post of governor-general, Damascus, for the first time was cleansed. No more garbage was thrown into the streets. The ruts and chasms in the thoroughfares were closed up. A service of scavengers and street-repairers was regularly organised. The powder-magazine was shifted to the suburbs. Three slaughter-houses were established in a suitable place, to which the butchers are compelled to take all the cattle to be killed. And, finally, a municipality was instituted whose revenue will be increased by the new slaughter-houses alone to the extent of £33,000 a year. Great, of course, is the outcry of the monopolists, whose traditional abuses are affected by these summary reforms, and the neighbouring pashaliks seem to have been looking on in amazement at the sanitary changes which, under their *régime*, are slower than the movements of a glacier. But the despotic power exercised by

Soubhi Pasha triumphed, so that an outlying province of the Sultan's dominions is now in a position to show an example of cleanliness and immunity from disease which Constantinople should imitate.

FISH VERSUS MEAT, AS NUTRIMENT.

DR. EDWARD SMITH can scarcely be said to have been happy in his recent endeavours to set the world right as regards its manner of feeding. His onslaught on the preserved milk, which is now so largely and beneficially employed to supplement the direct supply from the cow, has met with a deservedly severe rebuff; and within the last few days he has received the critical attentions, more forcible than flattering, of no less a personage than Baron Liebig. Into the general questions mooted in the Baron's letter to *The Times* we shall not enter; but there is one most extraordinary statement made by Dr. Smith in a paper read before the British Association which his illustrious critic has impaled on his sharp pen, and which deserves holding up to express reprobation at the present time. "Fish," says Dr. Smith, "is sometimes suggested as a substitute for meat; but fish is rather a relish than food, and contains little more nutriment than water." Von Liebig had merely to cite the well-known analysis of Payen to show the total incorrectness of this statement. Flesh of salmon contains more solid matter and less water than does fresh beef; flesh of herring is still less watery than salmon; and even flat fish, such as soles, are as rich in nitrogenous substances as the best wheaten flour, weight for weight. We cannot help saying that a dietetic reformer who commits such a portentous blunder as that involved in the above-quoted dictum of Dr. Edward Smith must expect to lose the confidence of the public, especially as the subject of it is at present of the greatest national importance, in view of the late discussions as to the enormous waste of our fish supplies that goes on at every stage after the material is caught.

MEDICAL EDUCATION OF WOMEN IN RUSSIA.

IN January next a special course of instruction for midwives will be instituted in the Imperial Academy of Medicine and Surgery, St. Petersburg. The following rules for admission to this course have been published:—Applications for admission will be received from the 1st to the 15th October, and preliminary examinations of the applicants will be held from the 15th October to the 1st November. All applications must be accompanied by documents showing the identity of the applicant, and by a certificate of tuition either in a middle-grade school (établissement à l'instruction moyenne—instituts, gymnases, &c.), or in a private educational establishment. Applicants who already possess a midwife's diploma, must present this with the other documents. The applicant must not be less than twenty years of age, and if she is still under the authority of her parents she must present their written consent to the application. Applicants will be submitted to a preliminary examination particulary directed to their acquaintance with mathematics within the limits of instruction adopted in the gymnasia for young girls, their intellectual development, and their knowledge of the Russian language. The special object of the course of study is to form a class of trained midwives fitted to give to parturient women all necessary medical assistance, and to treat the diseases of women and children (de traiter les maladies des femmes en général et celles des enfans). The course of study will be of four years' duration, and the fee for the course will be fifty roubles annually, paid by half-yearly instalments. The pupils will be required to submit to all the rules of discipline in force for students of the Academy.

LONGEVITY AND BRAINWORK.

AN article has lately appeared in *The Times* entitled, "Longevity and Brainwork," the writer of which seeks to ascertain from physiological data the influence of mental labour upon length of days. He comes to the conclusion that there is no such thing as overwork of the brain as regards mental application, and the activity of the higher faculties of the mind; and that such activity is not only directly conducive to long life, but that its absence is a frequent cause of premature decay. He attributes the mortality often ascribed to overwork to the gnawing influence of the emotions, which go to make up anxiety; and makes suggestions with regard to the kind of mental discipline by which these emotions may be subdued. The subject is one of the highest interest to physiologists and practical physicians, and the line of thought suggested by the writer is one well worthy of being pursued. The article called forth a curious letter from a Mr. Cook, which serves to show the degree in which the educated sections of the community may be unacquainted with the most elementary facts of science. Mr. Cook believes that certain persons have so much "will power" as to be able to shake off "physical fatigue and mechanical brain weariness," and so to continue intellectual work to their own injury. He does not seem to have asked himself where the "will power" is to come from—that is to say, what is to be its source when the brain is exhausted. Until he has decided this question his speculation seems to justify him in claiming to be the discoverer of a metaphysical perpetual motion.

PORT SANITARY AUTHORITIES.

SOME weeks have now elapsed since the Public Health Act became law, and we have a right to expect that the legal advisers of boards of health and other sanitary authorities have read it, even if the noble army now being marshaled under the roof of Gwydyr House has not yet learnt its lesson, or been sent into the provinces to teach it. The members of the Newport (Mon.) Board of Health were engaged in a lively discussion last week as to the introduction of small-pox into the town by means of the shipping. A similar question was raised last year, and while the clerks belonging respectively to the board of health and board of guardians were ventilating their knowledge by an interchange of correspondence, the disease spread rapidly. Newport is an important maritime town, for official returns show that no less than 557 vessels entered, and 1197 cleared thence, in the course of the past year. We may, however, safely anticipate that, before many months are past, a system of sanitary supervision will, under the auspices of the City Corporation, be instituted in the Thames that ought to give sound practical hints to all "outport" authorities throughout the kingdom.

"ANOTHER MIRACLE AT LOURDES."

LAST April, it seems, a girl aged fifteen, residing at Clermont l'Heraut, after an influenza, showed symptoms of brain congestion, under which she refused nearly all nourishment, and took violent fancies. Remedies of various kinds were tried by Dr. Chrestien in vain; and at last she insisted on being brought back to her parents from the convent where she had been taken ill. She grew worse, however, and Dr. Vaillé agreed with Dr. Chrestien, who had both been called in consultation by the local practitioner, to blister the patient and keep up her strength. But the brain had become more and more affected, and she could not bear the light, though consciousness remained. Later, the hands became so affected as to lead the doctors to ascribe it to the same cause as the contraction of the ocular muscles:

"the pupil being no longer in the centre, did not receive the rays of light." Finally the extremities became paralysed, and the patient seemed moribund. On being told that the blessed Virgin would hear her at the Chapel of Notre Dame du Peyron, she consented to go there. Having arrived, she asked to have her eyes bathed with the water of Lourdes, which had been taken to the chapel, and "she immediately recovered her sight." Brought into the chapel, her legs were bathed with the same liquid, and she was able to move them. Having heard mass said for her by the priest, to his great surprise, he saw her come to the altar to receive Holy Communion. On getting home, she was able to step out of the omnibus and meet her father. But for all this, "the recovery was not perfect, excepting her sight." Fresh brain symptoms appeared, and nothing would serve her but she would go to Lourdes. Thither she was taken in July, carried straight to the grotto, and on being bathed with the water, in the presence of some seventy persons, she recovered the use of her hands, the contortions of the mouth ceased, and after immersion in the water, the use of the feet returned, so that she could walk up twenty-two steps leading to the church, where she heard mass. In the evening she again bathed, and was able to mount twenty-two more steps, and finally returned to Clermont, to the joy of her friends, and the delight of the Catholic clergy at the "miraculous cure."

The cold douche is sometimes highly efficacious in hysterical paralysis, and we have seen faradisation produce permanent good in such cases.

SANITARY STATE OF CALAIS.

CONSUL HOTHAM, in reporting to the Foreign Office on the health of Calais and its district, sees no risk for anyone living temperately there. The inhabitants of the town are cleanly in their habits, and, as a consequence, healthy in their lives. Many of them attain to a patriarchal age. One man aged ninety-eight may be seen walking about every day. Except for slight deafness, he bears no outward signs of senility. Two years ago a woman, a native of the town, died in her 102nd year. She had undergone imprisonment with her husband in Paris during 1794, and was hourly expecting to be led forth to execution, when the overthrow of Robespierre released her. Consul Hotham saw her in her ninety-ninth year, and found her working without spectacles. Ages between eighty-five and ninety are often reached in Calais, the general salubrity of which is undoubted. Epidemics are rare, and when they do occur are of a mild form; while the aspect of the surrounding villages speaks volumes for the cleanliness and tidiness of their population.

LEEDS SMALL-POX HOSPITAL.

WE have received a copy of a report by Mr. Frederick Hall, medical officer of the above institution, on the small-pox epidemic as observed at that hospital from January to August of the present year. Like all similar observations elsewhere, the results at Leeds prove in a conclusive manner, not only the immense value of vaccination in modifying the disease, but also the great saving to life, health, and pocket which would follow were the practice generally and efficiently adopted. Of 55 patients reported as having been vaccinated, but in whom no vaccination-marks could be discovered, 31 died, or nearly as great a proportion as those who had confessedly never been vaccinated; while the percentage of deaths among those with good vaccination-scars was 3·8, it was 58·3 among the unvaccinated; and the average number of days that the latter remained under treatment was double that of the former. The necessity for the universal and efficient performance of vaccination is dwelt upon; and it is pointed out as an existing defect in our system that the Government does not institute some inspection of the children who are vaccinated at private surgeries or their own homes, instead of considering the production of a formal certificate as a sufficient guarantee that the operation has been properly performed. We are glad to notice, however, by the report of the vaccination officer at Leeds, that the operation of the amended Vaccination Act has already produced most satisfactory results in that town.

MASTER AND SERVANT: MEDICAL ATTENDANCE.

AT the Chertsey County Court Dr. Lundy lately sued Mr. Gomm, of Feltham, for attendance on defendant's servant. The defendant allowed that he was liable for the first visit, as it was made by his order, but maintained that he went to Dr. Lundy as the parish doctor. The tone of the defendant's view may be gathered from this sentence of the report: "My servant was taken ill, and I at once went to Dr. Lundy, he being the parish doctor." Nothing seems to have been said to Dr. Lundy of his being applied to as the parish doctor, nor was any order procured from the relieving officer to require his attendance. The judge, however, did not think the defendant liable, and gave judgment in his favour. The lesson of this case to all Poor-law medical officers is to have a clear understanding in all cases whether they are applied to in their private or public capacity. We must protest against the doctrine that any master may apply to a medical man to attend his servant simply because he is a medical officer for a Poor-law district. A great authority says that a man cannot serve two masters; but, according to this judgment of the County Court, a Poor-law doctor is the servant of all the masters of a parish.

MEDICAL OFFICER OF HEALTH FOR CHISWICK.

THE Committee appointed by the Commissioners of Improvement of the Parish of Chiswick have drawn up a Report, which has since been adopted, on the "Duties of the Medical Officer of Health." At the next meeting of the board the election of a medical officer will take place. The candidates in the field are Dr. D. A. Moxey, Turnham-green; Mr. F. C. Dodsworth, jun., of the same place; and Mr. William Leigh, of Chiswick. The duties required to be carried out by the medical officer of health, as set forth in the schedule of the Committee's report, are of a very onerous and responsible kind, and if discharged with a due amount of promptitude and judgment, the salary of £80 per annum will be uncommonly well earned. A reference to the respective names of the candidates in the "Medical Directory" affords information as to the professional status of each. It appears that Dr. Moxey is a medical graduate (with honours) of the University of Edinburgh, and a M.R.C.P. Lond. by examination, and on these grounds, and that of the high character of his published writings, and varied experience in his profession, Dr. Moxey may fairly claim to occupy the first position, and he has our wishes for his success in the ensuing election.

ADULTERATION AND THE LICENSING ACT.

MR. JOSEPH TAYLOR, the Secretary of the National Union for the Suppression of Intemperance, has called public attention to the deficiency of the new Licensing Act in respect of the provisions which were professedly intended to protect the public against the adulteration of alcoholic drinks. We say professedly, because we by no means regard the Government as being superior to that kind of management which is popularly known as running with the hare and hunting with the hounds; and we believe

there are many politicians who would consider it "smart" to carry a Bill which should appear to satisfy the demands of an influential section of the public, while at the same time it was felt to be harmless by those against whom it was supposed to be directed. Mr. Taylor points out that the adulteration clauses only permit the police to interfere, and do not enjoin them to do so. Under these circumstances, this part of the Act can only be a dead letter, and the respectable trade of the "brewer's chemists" will for the present continue to flourish as heretofore. It is satisfactory, however, to reflect that Parliament is fairly committed to the principle of endeavouring to prevent adulteration; and that this shall be effectually done can only be a question of time. Perhaps we must not grumble that in this, as in so many other things, we are constrained to move slowly—nor grudge to the brewer's chemists an interval in which they may dispose of their stock in trade.

"THE COUNTRY DOCTOR."

BEFORE any of our readers who think of settling down in country practice actually commit themselves to that line of duty, they should read the experience of Dr. Gallipot as detailed in the *Pall Mall Gazette* of September 28th. "It was in the course of Gallipot's last voyage with emigrants to the Fiji Islands that he finally decided for a quiet country practice." The account given by Dr. Gargle of his practice at Hillingham to Dr. Gallipot, who contemplates purchase, and the narrative of Dr. Gallipot's experience as the partner and future successor of Dr. Gargle, are pictures of life as genial and entertaining as they are natural. The writer takes the full advantage of the contrast between the emigrant ship doctor and the country doctor. It is a mercy that we are creatures of habit, and take kindly to our lot. We need not think despondingly of the life of our brethren the country doctors. Though Gallipot felt like a fish out of water, and thought that three months of Gargle's life at Hillingham would do for him, it is otherwise with those who are to "the manner born." Pity would be thrown away on the practitioners who live their healthy days in the saddle, moving benevolently between the rectory and the cottage, having neither riches nor poverty, and being on sympathetic terms with nature and all her servants, from the burly farmer to the patient labourer. There is not much money to be got out of such callings, but the country doctor is a great character in the country, and his life is richer than most lives in usefulness and neighbourliness. Not a few of the best specimens of medical men have been country practitioners.

FALSE VACCINATION CERTIFICATES.

THE following account of a most remarkable case of fabrication of false certificates will be read with amazement and regret by the profession:—

"At the Inverness Circuit, on Tuesday, Thomas Black Webster, a doctor of medicine at Dunvegan, Skye, was charged with having, in his capacity of vaccinator for the parish of Braccadale, fabricated false certificates to the effect that certain children had been by him successfully vaccinated, knowing the same to be false; and lodging them with the registrar for the district. There were in all twenty-three charges of this nature, ranging over the period from the 2nd March, 1866, to the 9th of March, 1871. —Mr. Mackintosh took several preliminary objections, to the effect that the charge was not a crime according to the law of Scotland. It was not said in the indictment that Dr. Webster obtained any recompense in granting these certificates, thus importing the essence of fraud; nor yet was it said that the life of any single person had been endangered by any false statements made in the certificates.—Mr. Moncrieff pointed out that upon the authenticity of these certificates the successful working of the Vaccination Act depends. These certificates, he contended, were not of the nature of an ordinary certificate by a medical man, but seriously affected the working of a public Act, and directly affected the public. It had been said no one had been injured. Who could tell? The registrar and public had been imposed upon, and the children had not been vaccinated, resulting in great danger to the community.—Lord Neaves overruled the objections.—The prisoner then pleaded Not guilty.—Donald Nicholson, inspector of poor of the parish of Braccadale, deposed that the twenty-three medical certificates shown were in the handwriting of Dr. Webster.—The parents of all the children named in the various charges were next examined, and deposed to their children not having been vaccinated by the prisoner.—Dr. Maclean deposed to having vaccinated the children only last year, by instructions in some cases from the board, and in others at the desire of the parents.—The Advocate Depute withdrew four of the charges. In the other cases the jury returned a unanimous verdict of Guilty, but recommended the prisoner to the leniency of the court, owing to his previous good character.—Lord Neaves sentenced the doctor to four months' imprisonment."

We must record the facts, though it be with shame. And we must acquiesce in the justice of the punishment. The public is not more injured by such conduct than is the profession.

ARTIFICIAL PRODUCTION OF EPILEPSY.

AT one of the late meetings of the Société de Biologie, M. Brown-Séquard communicated to the Society the results of experiments he had made to determine the path pursued by irritation of the sciatic in order to reach the upper part of the spinal cord and to produce epilepsy. Section of the sciatic nerve near its origin, and, still more, the forcible ablation of the nerve, are constantly followed by epilepsy. Nevertheless section of the spinal cord immediately above the origin of the sciatic nerve does not produce epilepsy. This unexpected fact gives rise to the suspicion that the occurrence of epileptic symptoms is not due to the section of the fibres of the sciatic nerve proper, but rather to the section of the fibres of the sympathetic which unite themselves to the sciatic after its emergence from the spinal cord. M. Brown-Séquard naturally thought it would be interesting to divide the several sympathetic branches that pass to the sciatic; but, unfortunately, this is extremely difficult to accomplish. Division of the great sympathetic in the abdomen produces only transient effects—incipient symptoms, as it were, of epileptic attacks, but nothing positive or definite. On the other hand, section of the roots of the last dorsal and first lumbar nerves produces epileptic attacks, and it is known that these roots furnish sympathetic filaments to the sciatic nerves. From all this M. Brown-Séquard concludes that it is to section of the sympathetic that we must essentially attribute the artificial production of epilepsy.

OYSTER CULTURE.

THE French Association for the Advancement of Science, which met at Bordeaux in the beginning of September last, were much occupied with the subject of oyster culture, and visited the extensive beds of MM. Michelet et Auschitzky at Arcachon, where it appears oysters have existed from time immemorial, though little attention has been paid to their breeding or to the removal of crabs and the Murex by which they are destroyed in large numbers. About twelve years ago, owing to the recommendation of M. Coste, the Government endeavoured to repeople the basin, and laid down a number of tiles, from these, however, it was found that the oysters could not be detached without considerable loss. Reflecting on this difficulty, M. Michelet, a simple workman of the place, after many trials, invented a calcareous material which, applied to the tiles, was sufficiently compact to resist

the action of the sea water, but at the same time easily permitted the detachment of the oysters. A further improvement consisted in placing those oysters that were more or less wounded and damaged in removal from the tiles, not into the sea again, but into *ambulances* or wooden cases, where they were able to recover without risk of being consumed by their voracious enemies. Of all these enemies the murex, which drills a hole through the shell, is the most dangerous; and M. Michelet, finding from careful observation that these animals never rose from the soil, contrived a zinc border to his oyster-beds, which was implanted at such an angle, pointing outwards, that the murex with its large and heavy shell was unable to climb it, and thus has materially diminished the numbers of their enemy by very simple means. He has adopted other sensible measures to lessen, as far as possible, the effects of great changes of temperature, which prove exceedingly fatal to oysters; and the result of all these improvements has been most satisfactory, for whereas only a million oysters were formerly obtained, M. Michelet has been able to export no less than fifty millions, and thinks the number may still be greatly increased.

HOW TO STAMP IT OUT.

IT is certainly expedient that the public should be reminded from time to time of its obligations to those who are ready to sacrifice themselves in the cause of duty; and some recognition is called for on our part of the promptitude and judgment, as well as Christian spirit, displayed by a Dr. Philson, late an assistant-surgeon in H.M.'s 58th Regiment, but now colonial surgeon and coroner for the city and port of Auckland, New Zealand. That place has escaped a great risk by his unostentatious labours. An unfortunate man named Thomson, having been sent to hospital, was discovered to be the victim of small-pox. An isolated house was at once procured, and a nurse, who had purchased protection by having already passed through the ordeal of that disease, was secured. All communication with the infected house was cut off. The patient's illness was such as to render recovery highly improbable; and his position was the more unhappy from the fact that he could not obtain at the hand of any minister that religious consolation he desired. Dr. Philson determined to give himself up to his patient; and, having in a great measure cut himself off from his own family circle, not only attended him professionally, but ministered to the religious cravings of the man by every means in his power. In the end the patient died; and Dr. Philson, with the view of averting the spread of the small-pox contagion, placed the body in a coffin and nailed it down without assistance, and had it speedily interred; and, further, he then personally washed and thoroughly disinfected every part of the house and every article that he thought might be the vehicle of the poison. The danger, be it remembered, was not that of the introduction of small-pox into a family, but into a whole country; and Dr. Philson deserves, in our opinion, no little credit for setting aside all questions of professional etiquette and sentiment, and applying himself heartily and courageously to stamp out the disease by his own unaided exertions. The local Government ought to show some recognition of services like these.

PESHAWUR.

A CONTEMPORARY recently called attention to the fact that it had been pointed out to the authorities that the troops stationed at Peshawur were insufficiently supplied with blankets, and that exposure to cold frequently caused a recurrence of fever among those men who had previously contracted malarious disease. According to the information furnished in a recently published departmental blue-book, it appeared that no result had followed the representations of the principal medical officer on the subject. We are glad, however, to learn that his Excellency the Governor-General in Council has promulgated certain modifications of the existing orders such as will meet all cases of this kind. It is now ruled that during exceptionally cold weather extra blankets will be issued by the commissariat department, not as soldiers' bedding, but as an extra issue, the property of the Government, to be returned into store when no longer required, provided the commanding officer and the principal medical officer at the station concerned consider such extra issue necessary. The supply of clothing may seem a very insignificant matter for our notice, but it was anything but insignificant to the troops concerned, and the Governor-General has shown a common-sense promptitude in recognising and complying with such obvious requirements.

GYMNASTIC TRAINING.

ONE signal advantage possessed by the Germans over the French in the late war lay in their superior marching power, staying power, and resisting power. Hereditary physique apart, this was doubtless due to the more thorough, scientific, and systematic training in gymnastics which most German lads undergo. According to official reports just published, the Turnvereine did "yeoman's service" in qualifying men for the ranks. The 1051 branches of those institutions contain 81,737 members, of whom 14,909 were called under arms. Of the remainder, a large proportion went into the field as volunteers, 1119 of them as assistants in the ambulance department. Out of the whole number, 1243 were wounded, 191 died through fatigue or sickness, and 617 were killed in battle or succumbed to their wounds. The Turnvereine in America and England contributed valuable contingents to the young gymnast volunteers of the Fatherland.

SPAIN AND CONTAGIOUS DISEASE.

THE Spanish Government, apparently, is not embarrassed by the opposition of female peripatetic orators. We understand that, in consequence of the urgent representations of the Admiral Commander-in-Chief of the Mediterranean Fleet that the men under his command had suffered greatly from venereal disease after having been landed at Vigo, the Spanish authorities ordered an inspection of all prostitutes in the port, of whom thirteen were found diseased and sent into the Lock Hospital; and the Alcalde has further ordered a weekly inspection of all the public women in Vigo.

BOOKS FOR HOSPITAL PATIENTS.

MUCH as the patients in hospitals have reason to be grateful to the munificent donors of books and other sources of mental recreation, there is no doubt that their gratitude would be still greater if a little more judgment were shown in the selection of the works, whether literary or artistic, presented. For one thing, the books and prints are too uniformly religious in their tenor—so much so indeed as almost to amount to a reflection on the efficiency of the hospital chaplain. Patients, while always the better for spiritual sustenance, have often a desire, not unnatural, to inform themselves on subjects which they have had no time to take up when well and busy. Many of them, for instance, would like to extend their knowledge of the scientific basis of the handicrafts they are engaged in; others, not less laudably ambitious, have a wish to make acquaintance with a standard author. How little such wants are appreciated may be inferred from the report of the chaplain of the Edinburgh Infirmary on the state of the library. Of

the 2000 volumes, nearly all are religious in their subject and tone; while the patients frequently ask for scientific, historical, or biographical works, books of travel, novels, and even poetry. The managers, on adopting the report, appointed a sub-committee to expend £20 on supplying works of the kind in which the library is so deficient; while also suggesting to donors that their literary presents might be more varied in character. The example of Edinburgh might be imitated with advantage in every hospital over the kingdom.

A MEETING of the Irish members of the Medico-Psychological Association is to be held on Wednesday, the 9th inst., in the hall of the King and Queen's College of Physicians, Dublin (the use of which has been kindly granted for the purpose), with the view of considering and making arrangements for establishing quarterly provincial meetings, as in England and Scotland, and for the discussion of matters of importance which more particularly affect the interests of the members of the Association in Ireland in official connexion with the public institutions for the insane in the sister country.

A SUICIDE of a remarkable character is recorded by the *Swiss Times* as having occurred at Zorfingen. The self-destroyer was a chemist's assistant, and lost his situation in consequence of his persistence in the habit of opium-eating. Having provided himself with a dose of prussic acid, he repaired to an inn and asked for a glass of water, at the same time saying laughingly to the waitress that if she had any message to St. Peter he would deliver it. The young man then coolly mixed the prussic acid with the water, drank off the mixture, and immediately fell dead.

A TESTIMONIAL, consisting of a silver candelabrum and stand, with an address engrossed on vellum, was presented to Dr. Basham, the senior physician of the Westminster Hospital, on Tuesday last, by the past and present pupils of the medical school in connexion with the hospital, as well as by his colleagues, on the occasion of his retirement from the Chair of Medicine, which he had filled for more than twenty-two years.

WE are glad to observe that the Westminster Commissioners of Baths and Washhouses have decided to issue penny bath tickets for distribution among the poorer and dirtier classes. This is a step in the right direction, and we hope the example thus set will be followed elsewhere.

THE post of Prosector to the Anatomical Chair in the Carmichael School of Medicine at Dublin has just been bestowed by the proprietors on William Thomson, Esq., A.B., M.D., &c., of the Queen's University. There were several candidates.

A DECREE has been published in the *Official Journal* of Paris transferring the Medical College and the High School of Pharmacy from Strasburg to Nancy.

Dr. Frankland and Mr. Morton have finished their inquiry into the causes of river pollution in Devon and Cornwall. Wales is next on the list.

THE official Report on Vaccination in New South Wales in 1871 calls strongly for compulsory measures.

PLEURO-PNEUMONIA is said to be very active in the neighbourhood of Winchester.

THE project of drying up the Zuyder Zee is stated to be again under consideration.

WE understand that it is contemplated to add a Faculty of Medicine to the Academy of Geneva and create it into a University. We hail the proposal, and wish it a speedy consummation.

PRESERVATION OF BODIES FOR DISSECTION AT THE LONDON HOSPITALS.

WE have on several occasions referred to the facilities that the Anatomy Act of 1871 offers for collecting bodies during the summer and autumn months for dissection at the commencement of October. But the difficulty was how the bodies were to be preserved for a sufficiently long time in order that a large collection might be made. This difficulty has, as will be seen from the subjoined report, to a great extent been overcome, but it cannot yet be said that perfection has been attained.

At *St. Bartholomew's* fifteen bodies have been preserved, some from the middle of July last, by the injection into the bloodvessels of Garstin's embalming fluid. What the exact composition of this fluid is we are unable to say, but glycerine, arsenic, and carbolic acid are the chief, if not the sole ingredients. This method has been adopted by the authorities at this school after careful and prolonged trials with most of the ordinary preservatives. About six pints of the fluid are forcibly injected into the aorta, and in about twenty hours the arteries are filled with red paint. The bodies are then laid on tables in an air-tight chamber. This process costs on an average seven shillings for each body. All the bodies are in good condition, there being no offensive smell; and in those bodies on which dissection has been commenced the muscles are of good colour and very firm; the nerves also have a good consistence, and are not more fragile than usual.

At *Charing-cross* no bodies have been preserved.

At *St. George's* three bodies have been preserved by the method used at St. Thomas's, which is the same as that used for many years by Mr. Marshall, professor of surgery in University College.

At *Guy's* twenty-three bodies have been preserved, the oldest from June 5th, by a method given in detail by Mr. Howse in the "Guy's Hospital Reports" for 1872. The process consists in injecting into the femoral artery of one or both sides of the body about three pints of glycerine, in which one pound and a half of arsenic has been boiled, and in two or three days forcibly injecting, by means of a syphon, about two gallons of pure glycerine. By this means the glycerine is made to permeate all the tissues of the body, bullæ containing glycerine not unfrequently forming on the skin. It is necessary to attend to the condition of the fingers and toes, for at first they swell up and become plump, but if left for a few days, they shrivel and dry up. This shrivelling is entirely obviated by injecting a further quantity of glycerine into the arteries. The bodies are then laid aside and covered with cloths soaked in carbolised glycerine, or are imbedded in sawdust soaked with carbolic acid. The red paint may be employed at any time, but it is well to wait for a few days after the injection of the glycerine before using it. The bodies are in good condition, the skin has become dark, but the muscles are of a good colour, and firm, and the nerves sufficiently tough to be readily traced out. This method, like the preceding one, is not well adapted for bodies in which a post-mortem examination has been made. The most serious objection to this process, however, is the cost, which is at least thirty shillings for each body.

At *King's College* eight bodies have been preserved, one for about six weeks, by the injection into the arteries, through the femoral, of what is called Stirling's fluid, which is made by the porter at the Edinburgh University. The exact nature of this preservative may, we believe, be ascertained by remitting £5 to the maker; but kreasote and methylated spirit play an important part in its composition, and it is not improbable that corrosive sublimate is one of its ingredients. We understand that this fluid is used by Professor Turner, of Edinburgh, and Professor Humphry, of Cambridge. There is no doubt, however,

that it is very efficient in preserving all the tissues of the body in a manner admirably fitted for dissection.

At the *London* no bodies have been preserved, but the method used there is the so-called Dublin method, which consists in opening the left ventricle, and passing an injection-pipe with a long nozzle from this into the aorta; a rubber tube being attached to this pipe, the bloodvessels are washed out with a weak solution of common salt till the fluid issuing from an opening in the left auricle is quite clear. After this a saturated solution of common salt and nitrate of potash is injected; and finally, the bodies are immersed in a solution of salt. For this method to be effectual it is desirable that the bodies be fresh and spare. The paint may be employed at any time.

At *St. Mary's* no bodies have been preserved.

At *Middlesex* no bodies have been preserved; but the method used is to inject by means of a syphon into the femoral artery a fluid composed of two quarts of glycerine, ten ounces of the solution of potash, and one pound of arsenic.

At *St. Thomas's* eleven bodies have been preserved in excellent condition, some for more than five months. The method adopted is identical with that used by Professor Marshall, to whom the authorities at this school are indebted for the details. In this process the arteries may or may not be injected with a weak solution of arsenite of potash, but Mr. Marshall objects to large quantities of arsenic being used, one or two ounces being quite sufficient for the purpose. The bodies are then immersed in a fluid consisting of twenty-four gallons of water, twenty-eight pounds of common salt, one pound and a half of nitrate of potash, and three pints of Burnett's fluid (chloride of zinc) to each body. After many trials these proportions have been found to be best adapted for preserving bodies for dissection, for if too much salt or nitrate of potash be used, the skin gets very hard. By this means Mr. Marshall has been able to preserve portions of the body in good condition for demonstration for a period of ten years. This method seems to be the best that we have yet seen; it has the further advantage of being the cheapest, and we understand that the fluid in which the bodies are immersed need only to be changed once in several years. If this process be adopted, it is advisable to inject the paint within a few days of immersion.

At *University College* seven bodies have been preserved by Garstin's fluid, but the bodies, after injection of the fluid, were imbedded in sawdust. These bodies are in good condition; one, however, which died about the middle of July, has become too dry for dissection. At this school only about half the quantity of the fluid used at St. Bartholomew's was injected into each body.

At *Westminster* no bodies have been preserved.

THE ISLINGTON WORKHOUSE SCHOOLS.

As the health of pauper children congregated together in schools is at the present time a matter of much interest, we publish a few brief memoranda of a visit to the schools for the Islington children at Hornsey Rise, which in many respects are an example to similar institutions. These schools are situated in an airy and high position on Hornsey Rise, and are well placed for catching the fresh air of the north. They contain 225 children, and of these 27 are now in the infirmary.

Nearly all the cases in the infirmary are cases of skin disease, which, to do the doctor and nurse justice, seemed to be entirely under control. There is no ophthalmia in the schools. The perfect cleanliness of the wards and the bedding, and of the children, was most noticeable and creditable. Even the scald-heads had a look of perfect cleanliness about them, and in no case was the disease active or showing any successful resistance to the treatment pursued by Dr. Cotton. Dr. Cotton's success in mastering the inveterate forms of skin disease, which seem to be the natural result of pauperism among children, appears due largely to two circumstances: first, that he gives a large amount of trouble and time to the work of trying to cure the cases, making the local applications himself; secondly, the local application, used freely, seems to be very efficient as a controller of the disease in question. The application used in nearly all bad cases of scald-head and of scabies, is a solution of nitrate of silver of the strength of one drachm to an ounce, used with a mop, pretty energetically applied by Dr. Cotton himself. It gives a little pain at first, but it evidently has a beneficial effect on the diseases. It is only fair to say that Dr. Cotton is seconded by a very efficient head-nurse, Miss Mary Ann Bishop. When applications have to be made to the scalp, and the hair has to be cleaned, cutting it short is greatly preferred to shaving, which is considered, and justly so, to be very irritating to the scalp.

The following are the particulars of the treatment of itch in these schools, of which, at the present moment, by the way, there are no cases, save one or two quite convalescent. The solution of nitrate of silver which we have mentioned is only used in severe pustular forms of scabies. In these it is applied with a mop. Two or three applications are generally sufficient for the cure, with an interval of two or three days between each, according to the severity of the case. If much irritation follow the application of this solution, a linseed poultice is applied. In all cases baths of sulphuret of potassium are used, of the strength of an ounce to a bath. The children are instructed to sit and soak in this bath for half an hour. In mild cases the sulphur ointment and the sulphuret of potassium bath suffice for the cure; but in all cases, mild or severe, when the cases are apparently convalescing, the children have every other day, for a fortnight, a sulphur vapour bath. This is managed easily, in the following manner, with a simple apparatus that may be got at Maw, Son, and Thompson's. The child sits on a wooden-bottomed chair, with a skeleton crinoline hanging from his neck and surrounding the chair, over which is placed an india-rubber sheet, and outside this a blanket, all converging at the neck. Under the chair is a spirit-lamp surrounded by a frame of gauze network. On the top of the frame is a tin cup holding two or three teaspoonfuls of sulphur, and this is surrounded by a groove for water, both the water and the sulphur being heated by the spirit-lamp contained in the wire cage. In pale anæmic cases good diet, cod-liver oil, and steel wine are found essential. All clothes of scabies cases are stoved with sulphur; and the same course is recommended with beds and bedclothes.

For ringworm Dr. Cotton uses glacial acetic acid. One application suffices, except in bad cases on the scalp, when more than one may be necessary. The part should be left alone after the application.

In porrigo Dr. Cotton uses frequently an ointment of equal parts of ung. resinæ and ung. picis, but in bad cases the solution of nitrate of silver, which must be well mopped in.

We were struck with the rarity of mortality in the schools. Our visit was in August last, and the last death was so far back that it was difficult to remember when it happened: it occurred in February, 1871. In 1870 there were two deaths, one from pneumonia, aged five years, and one from spinal disease, aged thirteen years. In 1869 there were three deaths, two from phthisis, and one probably from tabes. There had been no deaths for eighteen months. But when death happens it is from some form of disease implying impoverishment or struma.

Cubic space of the Dormitories.—Probably the children would be stronger, and there would be a smaller proportion of them in the infirmary, if the cubic space of the dormitories was more liberal. Thus, in No. 5, for infants, it is roughly 221 ft. per head; in No. 6, for girls, 296 ft.; in No. 7, for infants, 229 ft.; in No. 8, for infants, 192 ft.; in No. 9, for boys, 358 ft.; in No. 10, for boys, 262 ft.; in No. 11, new ward for girls, 721 ft. There is some provision for ventilation in the dormitories independent of the windows, but it would need to be very good to make the above cubic space sufficient.

Diet.—Meat is allowed to the children four days in the week. On one of these days Australian, or rather New Zealand, meat is supplied, which the children like much. The master, Mr. Cornish, said that they were very well pleased with the dinner of pudding on days when they had

no meat, though he thought they would be glad to get meat daily.

Remarks.—That there should be 27 out of 225 children affected with these cutaneous forms of disease in a very well ordered establishment may be taken to indicate that these complaints have some standing relation to infantile pauperism, whether to defect of air or of nutritious food, or of both. Many of the children had an unmistakably strumous appearance, and a large abdomen was especially common. It is only right, in judging of the management of these institutions, to remember that the strumous diathesis has been strengthened in the children by long years of pauperism, so that not only many of them come into the schools with unhealthy states of the skin and glands, but when these are cured, and the children are sent out of the infirmary into the schools, they are very apt to return again and again. Though there is little else than divers forms of skin disease in these schools, and these are kept under so creditably by the doctor and the nurse, it is evident that any relaxation of care or cleanliness, or any less efficient medical treatment, would be followed by outbreaks of skin disease on a large scale. The remuneration of the medical man is, by the way, quite inadequate and disproportionate to the work done. Notwithstanding the predominant cleanliness of the schools, there is a degree of communism in regard to the use of towels, combs, and brushes, which must tend to spread diseases either of the scalp or skin. As we have said in regard to other schools, each child should have a separate towel and comb. This precept may be objected to as troublesome or costly; but if it made a reduction of a dozen in the cases of scalp or skin disease, it would be well worth adoption. The difficulty, in these schools at least, is not in curing the children, but in keeping them well.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A MEETING of this Association was held on Tuesday evening, at the Medical Club, Spring-gardens, Dr. Joseph Rogers, the president, taking the chair. The object of the meeting was to take into consideration the abandonment by the Government of the dispensary clauses in the Public Health Bill, and the recent appointment of lay inspectors to carry out the provisions of the Act. Letters of apology were read from Sir Dominic Corrigan, M.P., Mr. Corrance, M.P., Dr. Dalrymple, M.P., and others. Dr. Lush, M.P., addressed the meeting, and in the course of his speech denounced the recent action of the Local Government Board as a monstrous piece of nepotism.

Dr. Vinal moved and Mr. Grimley seconded the first resolution: "That, in the opinion of this meeting, the salaries of the Poor-law medical officers have been arbitrarily fixed by the guardians, and sanctioned by the Central Department, without regard to any uniform standard or rate of remuneration; that they have not been raised in proportion to the increase of population, the ratio of pauperism, or the diminished value of money; and that, in the large majority of instances, they are a very inadequate payment for the onerous and responsible duties which the medical officers are called upon to perform. That this Association regrets that the Public Health Act, 1872, constituting the new local sanitary authorities and districts, should contain no provision for the establishment of public dispensaries on the model of those at present existing in the metropolis and in Ireland, and which have worked so efficiently in that country." The resolution was carried.

Dr. Joyce moved and Mr. Frost seconded the next resolution, which was also carried without dissent: "That this Association protests against the impoaition of new duties under the Public Health Act, in addition to those which they are called on to perform under the Diseases Prevention Act, and especially the part which they may have to take in connexion with the registration of diseases, and which this Association believes will not only be exceedingly onerous, but absolutely impracticable, if such dispensaries are not generally established, so as to relieve the district medical officers from the expense and labour of supplying medicines, and enable them by such means to check more promptly the first outbreaks of disease, and thereby diminish the principal cause of our enormous expenditure on pauperism."

Mr. Young moved and Dr. John Vance seconded the next resolution: "That, for the moral support and protection of district medical officers in the discharge of the difficult and often invidious duties which they will be required to perform under the Public Health Act, it is considered by the Association to be highly desirable that chief medical officers of health, debarred from private practice, should be appointed by county authorities, and by the authorities in towns containing a population of more than 200,000 in population, to whom the district officers might make their returns and reports, and on whom would devolve the responsibility (so damaging to gentlemen in private practice) of initiating proceedings under the new Act."

To this Mr. Barnes, the Secretary of the Association, moved as an amendment that this clause of the Act should not be opposed until it was seen how it worked. Dr. Walter Smith seconded the amendment, both gentlemen expressing their opinion that Mr. Stansfeld was in earnest in what he was doing for improving the position of Poor-law medical officers. The amendment, however, was lost, and the original motion was carried.

Dr. Lush, M.P., moved the next resolution, which, he thought, expressed the feeling of country medical officers, and Dr. Joyce seconded it, as follows: "That such appointments appear to this Association to be the more urgently needed to give the medical officers' reports weight with the local authorities, seeing that the most recent appointments of inspectors by Mr. Stansfeld for carrying into effect the provisions of the Public Health Act have been such as to give the public no confidence whatever in the administration of the Act, those appointments having been filled by gentlemen wanting even the rudimentary qualifications for such an office; and that this Association views with dismay that which appears to be a return to the old system of a lay and unskilled inspectorate, in spite of the promises of those under whose auspices the present Act has become law."

The meeting was brought to a close with votes of thanks to Dr. Lush and Dr. Rogers.

HOSPITAL DINNERS.

ST. BARTHOLOMEW'S.

THE annual dinner of the old students and the teachers of St. Bartholomew's Hospital, held in lieu of the ordinary Introductory Address, was given in the great hall of the hospital on the 1st. inst., and upwards of one hundred sat down to it. Mr. Luther Holden, the senior surgeon of the hospital, occupied the chair, and was supported by Sir James Paget, Sir Trevor Lawrence, Dr. Carpenter (the President of the British Association), Dr. Paget (Regius Professor of Physic in Cambridge), Dr. West, and many other distinguished members of the profession. In the course of the evening Sir James Paget's health, after a warm eulogy had been pronounced upon him by the chairman, was drunk with great enthusiasm. In his reply, Sir James referred to the circumstances which led to the proud position St. Bartholomew's held amongst the other great hospitals of London, and concluded by naively saying he hoped he should long be able to continue his course of clinical lectures in the school, as he knew no pleasure so great, whether shooting, fishing, hunting, rowing, whist, or billiards, as to be for a moment compared to that of lecturing to an attentive class. The toast of the Visitors was pleasantly given by Dr. West, and responded to by Dr. Carpenter and Dr. Paget, and the evening concluded by a vote of thanks to Mr. Willett for his exertions in promoting the pleasure of the guests.

ST. GEORGE'S.

The annual dinner of the St. George's Hospital Medical School was held on Tuesday evening at Willis's Rooms under the presidency of Mr. Shaw Stewart, the treasurer of the hospital. During the proceedings it was announced that a new and valuable Exhibition of £100 a year, tenable for two years, will be competed for by senior students in July, 1873.

ARMY MEDICAL SCHOOL, NETLEY.

THE opening lecture of the twenty-fifth session of the Army Medical School was delivered on the 2nd October by Dr. Macdonald, R.N., F.R.S., the Assistant-Professor of Naval Hygiene. Inspector-General Dr. Innes, C.B., Col. Farmar, assistant-commandant, the professors, and all the other officers of the Royal Victoria Hospital were present. After alluding to the cordial feeling existing between the Director-Generals of the Army and Navy medical services, by which candidates for all the public services are now enabled to be trained at Netley, and after giving a summary of the work to be done during the session, the lecturer mentioned the desirability of medical officers pursuing some branch of science outside the purely professional part of their work. The great opportunities which both army and navy medical officers have for the cultivation of collateral sciences were alluded to, and it was insisted that such cultivation is not merely of benefit to the officer concerned, but elevates the whole profession in public estimation. Selecting Natural History as being the subject which he, as a naval officer, had selected for study in his hours of leisure, Dr. Macdonald gave an animated sketch of the principles governing some of the movements of animals and plants, and illustrated especially the motive power of dialysis by reference to many curious points of natural history. He concluded an extremely well-written lecture by a few hearty words of genial counsel and welcome to Netley to the gentlemen who are about to enter the Naval and Indian medical services.

Correspondence.

"Audi alteram partem."

GUARANA.

To the Editor of THE LANCET.

SIR,—In THE LANCET of August 31 is a letter by Dr. Leconte, of Paris, on the subject of Guarana and its manufacture. The seed, it is said, is reduced to powder, mixed with water, and made into a paste. With this paste a certain proportion of whole and broken seeds is blended; then the mass is moulded into cylindrical rolls, and in this state is ready for the market. I have had a specimen thus described by Dr. Leconte sent me from Oporto through the courtesy of Dr. Brandt. It is a hard brown mass, like a German sausage, in parts homogeneous, and in parts made up of the whole and broken seeds of the plant. Dr. Brandt says: "I avail myself of the kind offer of a friend to send a piece of guarana, made by the Gentios, or Indians, in the interior of the province Rio Grande de Sul. Guarana is to be had in most of the provinces, but that made in Rio Grande is the best. The mass is prepared from the seeds of the fruit. The natives reduce it to powder by a coarse file, and mix it with sugar and water; it makes an agreeable and refreshing drink. It is used in diarrhœa, and said to be astringent. I have tried it in migraine since your paper, and have found it successful in two well-marked cases."

My principal object in now writing is to keep up the interest of the profession in what I believe to be a most valuable remedy in sick-headache. When I first brought it before the notice of my medical brethren I recommended it mainly on the strength of letters I had received from friends in Canada, having only made use of it myself in a few cases. Since this time, however, I have been applied to by many sufferers, including, I am sorry to say, several medical men, and am frequently asked for the result of my experience. I find it quite impossible to afford an accurate account of my cases, since many of them have not been immediately under my own eye, and the patients whom I have known have only been able to give me a verbal description of their symptoms. Of these, however, so many have spoken so positively of the relief which they have obtained, that I can have no hesitation in attributing the effect to the remedy. I am now seeing a lady who speaks most enthusiastically of it, as she has not had a headache for nearly six months, having on several occasions warded it off by the guarana. I have in my note-book several other cases where the same positive statement is made. I have now before me two letters just received from young ladies living respectively in London and Ipswich. The one says, "I have found great benefit from the guarana powders which you recommended me; they almost invariably cure my headache." The other lady says: "When you prescribed guarana powders for me last May for severe and frequent headache you asked me to write and let you know if I found them beneficial. I have every reason to believe them a complete preventive of headache, as on the least symptom I have taken a powder, sometimes a second, in two hours of a time, and in no case have they failed as an effectual cure. I have not had a bad headache since I saw you." I quote these letters as evidence of the value of the remedy in some cases, and that it is worth an extended trial.

Your obedient servant,

Grosvenor-street, Sept. 27, 1872. SAMUEL WILKS.

TYPHOID FEVER IN INDIA.

To the Editor of THE LANCET.

SIR,—To comply fully with Dr. Morehead's request, as expressed in his letter in THE LANCET of the 21st of September, it would be necessary for me to give the names of all the medical officers under whose charge fatal cases of fever have occurred within the last few years. This I am unable to do, nor could it answer any useful purpose. My statement "that it is at last pretty clearly made out that three-fourths of the fever deaths at least are genuine typhoid," was based mainly on information given at pages 280—283, of the Report of the Sanitary Commissioners with the Government of India, by Dr. Bryden, whose accuracy in such inquiries is well known. Referring to the fever from which young soldiers die, Dr. Bryden writes—"The continued fever is in almost every case true typhoid." And again, speaking of the fever casualties of 1870, which was in no way an unusual season, he says: "In the current year, up to July, 71 deaths from fever have been recorded; of these 35 have been acknowledged to be true typhoid, and 36 are returned as remittent and continued fevers. We know, however, that many of the deaths of boys and young men were in reality caused by typhoid, and probably three-fourths of all these fever deaths were due to true enteric fever."

Dr. Morehead is evidently unconvinced that the deaths from typhoid are at all so numerous as I have represented. In the first edition of his Clinical Researches on Indian Diseases (1856), he altogether denied the existence of this fever in India, and so late as 1868 he maintained that it was rare.

But the discrepancy between us is more apparent than real. Dr. Morehead has been accustomed to classify cases of fever attended with ulceration of Peyer's patches as remittent, whereas I regard them as typhoid, and I think I have the sanction of the best authorities for doing so. The details given by Dr. Bryden leave no room for doubt that a fever answering to this description is prevalent all over Upper India, and my personal observation has satisfied me that it is far more common than appears by the returns, for I have frequently found that medical officers, following Dr. Morehead's example, had set down as remittent cases which I should have reported as typhoid. The diagnosis of fevers in India, as in England, has been vastly simplified by the use of the thermometer, an instrument very rarely if ever employed for that purpose in Dr. Morehead's period of service.

As Dr. Morehead considers that the fever attended with ulceration of Peyer's patches is due to malaria, he will doubtless demur to my argument that the great prevalence of the disease affords strong presumptive evidence that the water-supply is in fault. It will be strange, however, if a disease propagated mainly by excrement-tainted water in England turns out to be due to malaria in India.

Your obedient servant,

A. C. C. DE RENZY,
Surgeon Major.

September 30th, 1872.

"FOREIGN DEGREES AND THE MEDICAL DIRECTORY."

To the Editor of THE LANCET.

SIR,—Though I am a legally qualified practitioner, holding the double qualification, besides a midwifery diploma, and of twenty-five years' practice, Mr. Churchill excludes my title of M.D. from his Directory, because I obtained it *in absentia*, merely for a title, years before such a thing as registration was effected; whilst he retains in his Directory M.D. procured *in absentia* from Scotch universities. Is this fair? Permit me to suggest that all those *legally qualified* men who obtained degrees *in absentia* before the passing of the Medical Act should have their titles of M.D. retained in the Directory.

It is to me, however, a thing of small importance whether Mr. Churchill gives me in his Directory the title of M.D. or not, or even gives my name at all, as I am perfectly indifferent to either, but in justice I thought I would, with your permission, make the above suggestion.

As we have a "Medical Register" I cannot see much use in the issue of a "Medical Directory," and will therefore certainly request the editor to omit my name, unless he chooses to give me my full titles.

Yours truly,

27th Sept. 1872. M.D., M.R.C.S, L.S.A., and L.M.

BIRMINGHAM.

(From our own Correspondent.)

THE annual board of the governors of the General Hospital was held on Sept. 18th. The report showed that the in-patients had numbered 2655, the out-patients 20,262, showing a decrease of 263 in the former, and an increase of 228 in the latter department, as compared with the previous year. The expenditure was £12,989 (including £500 for alterations), which was £1388 more than the average of the preceding three years. The income was £12,259 (exclusive of £4470 received from congregational collections), being £2778 more than the average of the three previous years. The Chairman said it was intended to have another public dinner in the spring, by which it was hoped to clear off the debt on the building fund. After passing the usual complimentary votes, the meeting was adjourned till the 18th of October, to afford every governor an opportunity of considering the articles of association prepared by the Committee, with a view to the incorporation and re-establishment of the hospital under the Joint-Stock Companies Act. The Board acknowledged the receipt of Mr. D. W. Crompton's portrait, which will hang in the board-room, and remain as a permanent recognition of his long and valuable services as surgeon to the hospital.

An interesting case of recovery after fracture of the base of the skull has recently left the wards of the Queen's Hospital. A woman, aged forty, fell down a flight of stone steps on to her head. Profuse bleeding from the ears and nose ensued, and subsequently vomiting of blood. The patient was semi-comatose for forty-eight hours, and had a continuous discharge of cerebro-spinal fluid from the left ear for nine days.

Mr. West has a case of chronic synovitis of both knee-joints under his care, in which, after the failure of a variety of plans of treatment, both internal and external, he has done great good by introducing the largest canula of the aspirator, and drawing off two ounces of brownish serum from each joint. No constitutional irritation was set up by the operation, and the man, aged forty-two, was able to leave his bed at the end of a week, and to walk about.

On the 21st September the tongue of a man aged seventy-two, which was extensively affected by epithelioma, was removed by means of two écraseurs. The transverse one occupied ten minutes, and that which included the parts at the floor of the mouth six minutes and a half, in dividing the tissues. Slight hæmorrhage followed, but was soon stopped by the actual cautery. Chloroform was used during the operation. The man is now able (on the tenth day) to swallow and to articulate many words.

Mr. Gamgee recently excised a large polypus uteri of twelve months' growth from a woman aged forty.

Mr. Jordan has operated for cystocele and rectocele which coexisted in a patient with ruptured perineum with success, and on the same day removed a myeloid tumour of the lower jaw, from a child aged ten years.

The following operations have recently been performed at the Hospital for Women:—Ovariotomy, by Dr. Savage, in a patient aged sixty. The tumour was multilocular, and contained eight pints of gelatinous material. It was free in front, but very adherent behind to the intestines. Some of the adhesions were broken down, and others were divided and secured by catgut ligatures. The external excision was about two inches in length. The woman sank after thirty hours. On examination, no hæmorrhage or peritonitis was discoverable, but there was fatty degeneration of the heart and œdema of the lungs. There have been two successful cases of perineoraphy, and one operation for removal of a polypus uteri. The patient, aged forty-five, was almost drained to death by hæmorrhage when she came to the hospital, and the tumour was at once removed by the écraseur; she is now progressing favourably.

Dr. Russell Reynolds, F.R.S., has consented to deliver the inaugural address at the opening of the session of the Midland Medical Society. "The application of Electricity in relation to Nervous Diseases" is to be the subject of his discourse, and from the known ability of the lecturer, and his intimate acquaintance with this department of medicine, a great intellectual treat may be expected by the members of the Society, and also by the profession generally throughout the district, to whom an invitation to be present will be sent by the Council of the Society.

Birmingham, Sept. 30th, 1872.

LYONS.

(From our own Correspondent.)

THIS medical gathering in the second city of France is now over, and I proceed to complete the sketch I offered of the meetings of the first two days. Before doing so, however, I cannot forbear stating how strenuously the promoters of the Congress exerted themselves to make the stay of their medical brethren agreeable. First and foremost I should mention the well-known syphilographer, M. Diday, who presided in a most effective manner, and whose hospitality and courtesy were above all praise; M. Ollier, the skilful surgeon, whose splendid apartments were liberally thrown open for a succession of gastronomic entertainments. Nor were the committee unmindful of the relaxation necessary after several days' attention to professional subjects. They organised on the 22nd an excursion to Dombes, remarkable for its beautiful sites and mediæval monuments. Nor was a meeting-room wanting where the members could obtain refreshments and enjoy each other's society. It was plain that the utmost care had been used to render the Congress successful. Nevertheless, it must be confessed that it was only partially so. In the first place, the time over which the Congress extended was too long; it was a mistake to fix as many as eight consecutive days. The committee, who had requested that the papers should be sent in at least ten days before the opening of the Congress, ought to have made a selection and taken measures for restricting the time granted for the reading to twenty minutes, or, at most, half an hour. They should, as I stated in my former letter, have allowed immediate discussion, and not postponed the latter to the evening sitting, when more papers were brought forward, that cramped the interchange of ideas. No mode is more convenient than the division into sections, especially as thus the whole business may be concluded in three or four days. There was, indeed, a Medical section at the meeting of Bordeaux the other day for the advancement of science, and such section may perhaps henceforth be considered sufficient for the purpose of bringing forward original conceptions and new modes of practice. Be this as it may, the profession at Lyons deserve the best thanks for their exertions, and no one who has attended the Congress will easily forget the pleasant hours he has spent.

As to the strictly scientific bearing, I left off in my last

at the period when gunshot wounds were discussed. This subject, considering that France has just traversed a destructive war, and that many members of the Congress had served in ambulances and military hospitals, seemed calculated to draw forth valuable papers and animated discussions. It was, however, not so. The principal communications were from Prof. Verneuil and M. Ollier. The former discussed, in his accustomed felicitous manner, the new method of dressing wounds with wadding proposed and practised by M. Alphonse Guérin of Paris. M. Verneuil showed that leaving wounds covered with cotton-wool exposed the patient to all the evils connected with accumulation of decomposing secretions. He was, however, a supporter of occlusion, and showed that the latter, when carefully carried out, was of great advantage. The orator did not allude to Mr. Lister's practice, which is, in fact, based upon a similar principle, and had been before the profession long before M. Alphonse Guérin gave his attention to the use of wadding. The same remark holds good respecting a paper by M. Tripier, on Amputation at the Knee-joint. The author did not take notice of the success of English surgeons in this operation, among whom Mr. Pollock holds a prominent place. M. Tripier performed experiments on animals, and showed the femur of a dog which, after disarticulation at the knee, presented, six weeks afterwards, well rounded condyles, by the care with which the synovial membrane had been preserved. As to the cotton-wool dressing, it was shown by M. Ollier that its advantages were enhanced by the steadying of the limb in a silicated apparatus. But the interest of the day lay principally in M. Ollier's papers on the Resection of Joints after Gunshot Wounds. He showed that, even in a splintered fracture of the elbow, the periosteum may be shaved from the spicula, and preserved to much purpose. (Photographs and the actual fragments were exhibited to the meeting.) Nay, when the diaphysis of the humerus is splintered by a ball, excellent consolidation may be obtained by removing as much as an inch and a half of the shaft, and shaving off the periosteum. The author treated with great lucidity the question of the choice between amputation and resection when a joint is injured by gunshot, the more or less destruction of the soft parts being a guide for coming to a decision. M. Laroyenne then offered an interesting communication on the indications of immediate operation in gunshot wounds. At this period the president wished to put to the vote a question treated at the meeting of the preceding day—namely, whether it is desirable that compulsory vaccination should be introduced into France? and the vote was unanimously in the affirmative.

On the third day the Congress were requested to consider the question of ambulances in time of war. M. Sarrazin, formerly of Strasburg, read a valuable paper on the Reorganisation of Ambulances, and showed very forcibly what reforms are urgently required. M. Léon Lefort, whose experience on the subject is considerable, addressed the meeting in a vigorous speech, in which he treated in a masterly manner of the construction and working of ambulances. M. Bédoin then showed a new stretcher, which presented some advantages.

The subjects in the evening, after a short discussion, were of various kinds. Among them I would mention an interesting communication of M. Guibert on the Eucalyptus globulus, and M. Chatin's paper on an Epidemic of Whooping-cough.

On the fourth day the important question of the Rinderpest was brought forward, and elicited a number of papers. M. Pigeon tried to prove in his essay that the typhus of cattle is *not* contagious, a position which M. Saint Cyr combated with much warmth and some success. But the most complete exposition of the cattle plague was certainly by M. Peuch, whose paper comprised, in a very practical and lucid manner, the whole of the subject. At this stage the regularity of the programme was departed from, and M. Pétrequin was allowed to read a paper on a Comparison between the Mineral Waters of France and Germany, in which he attempted to prove that the former country was in no way inferior to the latter, and could offer the analogue of most German spas.

The evening of this day, like most other evenings, was devoted to spontaneous communications unconnected with the subjects fixed by the programme. This arrangement is, however, very unfavourable to discussions, which, after all, ought to be the staple of these gatherings. M. Pupier mentioned experiments on fowls, tending to show the comparative effects of alcohol. M. Maury spoke about the training of private nurses. It was thereby plain that we are much better off in this country than in France. M. Magnan alluded to experiments on the action of alcohol and absinthe, especially upon dogs. M. Richelot then tried to prove that the mineral waters of Mont-Dore are eminently useful in chest complaints, especially through the arsenic which they contain; and Mr. Letiérant finally made some remarks on feeling, after section of the sensory nerves of the face.

On the fifth day, September 23, the very important question of the causes of the decrease in the population of France was brought forward. This is certainly a subject of much interest to our neighbours. A paper was read in support of the Malthusian theory, but most communications reasoned in the contrary direction. M. Rodet's excellent highly moral and sensible essay should be especially mentioned. He opposed Malthus with very stringent arguments, attacked the prevalent vices of French society, and showed that the nation should be virtuous, well conducted, and numerous. He contended that the soil would always be amply sufficient to feed the people, saying that, in the late war, France was crushed by numbers. The author pointed out the principal defects of French education, the false manner in which young men live, the venality of marriages, the dereliction of mothers who do not nurse their children, the unfitness of men worn out by excesses to beget healthy children, and the defective physical education of young women, which is unfavourable to healthy maternity; nay, they are alarmed at the idea of child-bearing. M. Bouchacourt followed with a most sensible speech, in which he proved the importance of the management of children in the first year. He contended that during gestation mothers should repair to the sea-side or the country, to give vigour to this important function. M. Bouchacourt deprecated the eternal applications to the government, and contended that the doctors themselves ought to take these matters in hand. Here M. Mayer, of Paris, made a strange proposal: viz., that nursing by the mother should be rendered compulsory. This was strenuously opposed by M. Trélat, a hospital surgeon of the French capital. The president, M. Diday, tried to obtain a vote of the Congress against the use of tobacco, but failed.

On the sixth day, Mr. de Méric, of London, read a paper on the question proposed in the programme—viz., on the Treatment of Syphilis. The author followed closely the commentaries put forth by the Committee, and endeavoured to show that mercury is useful—nay, in some instances, indispensable. These views were ably supported by M. Clerc, the eminent syphilographer of Paris, by M. Rodet of Lyons, and by Prof. Pacchiotti of Turin, who, in an enthusiastic speech, defended mercury, and gave the due meed of praise to Messrs. Rollet, Diday, and others, of Lyons, who had rendered such signal services in the study of syphilis. M. Dron, surgeon to the hospital for venereal diseases in Lyons, read a valuable paper on hypodermic injections of corrosive sublimate in syphilis, and stated that, after very careful and numerous experiments, he was not in favour of this method. M. Diday, in his usual fluent manner, brought forward his reasons for refraining from the use of mercury, and gave interesting statistics as to the mercurial treatment in the kinds of syphilitic attacks, which he calls mild, of medium strength, and severe. The eminent syphilographer, Dr. Bumstead, of New York, was present at the meeting, which was numerously attended, and proved rather exciting.

On the seventh day, the very interesting subject of reforms in the teaching of medicine and pharmacy in France was discussed. M. Trélat was the principal orator, and wished that the right of practising the healing art should be granted on the German system. His speeches were characterised by a warmth and vigour bordering on enthusiasm. The discussion was very animated; but it was finally agreed by the meeting that the teaching of medicine should be perfectly unshackled in France. In the evening M. de Valcourt, of Cannes, offered a sketch of the teaching of medicine out of France. M. Trollard spoke of the faculties and the provincial schools of medicine, and M. Mayet of the manner of carrying out clinical instruction.

On the eighth and last day the question was as follows:

"On the Practical Means of Improving the Status of Medical Men, and bringing such Status on a level with the importance of their duties." Here the papers were of great interest, and the discussion of course kept up with much animation. The Congress now closed in a very impressive manner, though most of the members not belonging to Lyons had already taken their departure.

In spite of a few defects, the fourth session of the French Medical Congresses has passed off very satisfactorily.

Obituary.

DR. JAMES CHATTERTON,

ASSISTANT-SURGEON, SCOTS FUSILIER GUARDS.

IT is with much regret that we have to record the death of this young and promising medical officer, at the early age of twenty-eight years, from that relatively rare, but very fatal affection, facial carbuncle. Assistant-surgeon Chatterton was born at Cork in 1844, and became M.D. and Master of Surgery of Queen's University, Ireland, in 1868, and M.R.C.S. England about the same time. The deceased officer was the eldest son of George Chatterton, Esq., J.P. He was educated at Sandwich School, Kent, and entered Queen's College, Cork, in 1862. During his Arts course he obtained scholarships in Mathematics, Chemistry, and Modern Languages, and took his B.A. in 1865.

At the competitive examination for the Army Medical Service, held at Chelsea in August, 1868, he took the first place, which he subsequently maintained at the Netley examination in February, 1869. He served for a short time in North America as a staff assistant-surgeon, and was appointed one of the surgeons to accompany the Red River Expedition. On his return to England he was gazetted as assistant-surgeon to the 2nd battalion of the Scots Fusilier Guards in 1871. The circumstances connected with Dr. Chatterton's illness and death were both uncommon and distressing. A little more than a week before his death, he noticed that a small pimple had made its appearance just inside the nostril. At first he paid little or no attention to what he and others considered a trifling local affection; but in a few days it spread much in size, affecting one wing of the nose and adjacent cheek. Great swelling and œdema subsequently surrounded this circumscribed carbuncular growth. The progress of this affection was attended with extreme pain.

After the occurrence of a severe rigor, symptoms of pyæmic infection with pneumonia and pericardiac effusion rapidly developed themselves, resulting in the death of the unfortunate officer in some eight days from the first appearance of the facial disease.

EDWARD LESLIE FALLOON, M.R.C.S.

MR. FALLOON, one of the best known practitioners in Liverpool, died there, at his residence, 12, Shaw-street, on the 13th inst. The deceased gentleman pursued his studies, preliminary and professional, at Trinity College Dublin, where he was known as a diligent and successful student. He filled with credit the post of clinical clerk to Steevens' Hospital. In 1840 he took the diploma of the Royal College of Surgeons of England, and shortly thereafter so distinguished himself as assistant-surgeon to the Bengal Volunteer Regiment in the China Expedition as to obtain a medal in acknowledgment of his services. Settling in Liverpool in practice, he became assistant-surgeon to the volunteer rifle brigade of that city, and also discharged the duties of medical referee to the Marine Life and Casualty and Briton Insurance Companies. In 1865 he was admitted by examination a Licentiate of the Edinburgh College of Physicians. By this time his practice was considerable, while his name was honourably identified with the literature of the profession. He was very popular with his brother practitioners, in spite of a local controversy in which (as readers of THE LANCET will remember) he was engaged some two and a half years ago; and as a citizen he was much esteemed for his public spirit. After a long and painful illness, which he bore with manly equanimity, he died in his fifty-fourth year.

EDWARD LANGDON BRYAN, M.D.

AN old contributor to our columns, and a physician of versatile attainments, has just passed away in Dr. E. L. Bryan, a long resident at 15, Kensington Park-gardens. He became a member in 1836, and a fellow in 1853 of the Royal College of Surgeons of England, and in 1855 graduated as Doctor of Medicine at King's College, Aberdeen. Five years later he was admitted a member of the Royal College of Physicians of England. From an early stage of his professional career he bestowed special attention on the heart and its functions, contributing to THE LANCET in the years 1832–33, papers "On the Rhythm and Movements of the Heart"; on the "Form and Motions of the Heart, and the uses of its various parts"; and in 1836 an elaborate "Critique on the Report of the Dublin Committee of the British Association on the Heart's Sounds." He subsequently became manager of the Hoxton House Asylum, and discharged the duties of the post with fidelity and skill. His practice was considerable at the West-end; but latterly ill-health set in, and he repaired to Brighton, where he gradually grew worse, and died on the 20th ult.

BENJAMIN KERR, M.R.C.S.

AT Crick, near Rugby, on the 7th inst., this well-known practitioner died, in his forty-eighth year. He took the diploma of the Royal College of Surgeons of London in 1852, and in the following year became Licentiate of Midwifery, and Licentiate of the Apothecaries' Company in 1856. In addition to a large and increasing practice, he acted as medical officer to the Crick and Kilsby Districts of the Rugby Union, and was a certificated surgeon of factories. Mr. Kerr was very popular as a citizen, and much esteemed as a surgeon.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 26th ult.:—

Clark, Frederick Cheesman, Croydon.
Shaw, Josephus, Lees, near Manchester.
Martin, John, West Bromwich.
Whitaker, James Sealy, Hampstead-road.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Charles Edw. Barnard, Albert Churchward, and Ernest Sexton Medcalf Guy's Hospital; Richard Edward Robinson, Leeds Hospital.

At the Preliminary Examination in Arts held at the Hall on Sept. 27th and 28th eighty-eight candidates presented themselves, of whom thirty-four were rejected, and the following fifty-four passed and received certificates of proficiency in general education:—

FIRST CLASS (order of merit). — 1st. Alfred Chawner. 2nd. Thos. Arthur Richardson and C. L. M. Taylor. 4th. George Thornton Cape, William I. Cobbin, William Wood Cuthbert, and F. M. Sandwith. 8th. W. S. Andrews, W. T. Jackman, Lawrence Mahony, Herbert J. K. Moberly, Frank Newcombe, and Sidney Skerman. 14th. Owen Bowen, Richard Lyddon, Philip Stocks, and Frank John Wells.

SECOND CLASS (alphabetical order). — Robert Aldous, John Battams, Robert C. Benington, Louis F. H. Birt, Sholto S. Bowles, James Brett, Robert Clapp, George Walker Collier, Thomas Archer Colt, Charles Percy Dean, Arthur Baird Douglas, Alexander W. W. Dowding, James Hay Dunlop, Samuel Henry Edgelow, Frederick Alexander Fletcher, John Chubb Ford, Frank Samuel Goulder, Edward M. Greensill, John Grimwood, William C. Haisne, Frederic Mortimer Hawkins, John Hollingworth, Robert Charles Hope, Samuel V. Instone, James James, Vincent Alexander Jones, Charles William Lacey, Walter Pye, Jesse W. Robey, Eugenius A. Roche, Charles Schön, Walter Sheppard, Joseph W. Sugden, John E. G. Sykes, William Henry Webb, John Cooper Wilkinson, and Benjamin F. Zimmerman.

EARL CATHCART, the President of the Royal Agricultural Society, has offered a prize of £100 for the best essay on the potato disease.

IN the first half of the present year, duty was paid on 12,282,478 gallons of home-made spirits for consumption in the United Kingdom.

KING'S COLLEGE HOSPITAL has received a fourth £1000 from "M. W. O." Mr. Charles Brook, of Enderby, bequeathed £1000 to the Huddersfield Infirmary, and £500 to the Leicester Infirmary. Mr. John Fulton, late of Belfast, has bequeathed £300 towards the funds of the Belfast General Hospital.

A DESPATCH from Cuba to the "New York Herald" says: "Two surgeons, one an American, the other a German, were lately found serving in the insurgent hospital in the Tacajo Mountains. They were captured by a detachment of the Matanzas battalion, and immediately executed."

ON Tuesday, the 1st instant, Dr. E. Edmunds, of Hercules-buildings, was found in his night-clothes, lying in a front room, gasping and speechless. Dr. Lucas, who resides on the premises, having been summoned, found on the table a bottle containing prussic acid, part of which it seemed evident Dr. Edmunds had swallowed. The means employed to restore the unfortunate gentleman were unavailing, and he died in about half an hour after the arrival of assistance.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.—At the annual meeting of this Society, held September 30th, 1872, the following gentlemen were elected the office-bearers for the session 1872-73:—President: Dr. Philipson. Vice-Presidents: Dr. Burnup, S. W. Broadbent, Esq., Luke Armstrong, Esq., and Dr. Peart. Honorary Secretary: H E. Armstrong, Esq. Committee: Dr. Page, Dr. Arnison, Charles Carr, Esq., John Hawthorn, Esq., Dr. B. Bramwell, Dr. Humble, John Russell, Esq., Dr. Denham, and C. S. Jeaffreson, Esq.

THE Twenty-first Report of the Inspectors of Lunatic Asylums in Ireland for the year 1871 has now been published. From it we find that the statistics of insanity record a very large increase in the number of the insane for the past year, amounting to no less than 1134. The total number of lunatics in Ireland for 1871 amounted to 18,327, whilst in 1846 there were but 12,397, showing an increase of 5930 from that period, with a diminution of the population of upwards of two millions and a half. It appears also that the known proportion of the insane to the sane population has increased to an extent that is rather startling, the ratio being in 1846 as 1 to 661, and in 1871 a fraction below 1 to 300. The inspectors cannot account for such an enormous increase in the number of lunatics, but state that the statistics of a series of years seem to show that the growth of asylum accommodation had a tendency to develop the amount of lunacy existing in the community not previously brought to light. The cost of support and maintenance in the district asylums amounted to £177,395, being an increase of £10,467 over that of the preceding year, caused by the extra number of patients (293), and by the dearness of provisions during the last twelve months. The mortality during the year was 582—305 males and 277 females,—whilst 983 patients were discharged recovered, and 254 as improved during the same period.

Medical Appointments.

ALDER, J. W. B., L.R.C.P.Ed., L.R.C.S.Ed., has been elected Medical Officer for the Town District of the Alverstoke Union, vice W. J. Rundle, M.D., Ext. L.R.C.P.L., deceased.

BOWEN, J. H., M.R.C.S.E., has been appointed a District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, Manchester, vice W. H Latham, M.R.C.S.E., resigned.

BROWN, Dr. J. C., has been appointed Public Analyst for Liverpool.

BROWNE, H., M.D., has been appointed a Visiting Physician to the Royal Lunatic Hospital, Manchester, for the ensuing year.

DODDS, J. G., M.R.C.S.E., has been appointed Medical Officer for the Lewtrenchard District of the Tavistock Union, vice J. H. Willis, M.R.C.S.E., resigned.

DUNSTAN, R., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Penzance Union, vice G. B. Rosewall, M.R.C.S.E., resigned.

HALDANE, Dr. W., has been appointed Parochial Medical Officer for Braemar, vice Brown, resigned.

HAYNES, A. L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 2 of the Evesham Union, Worcestershire, vice J. B. Haynes, F.R.C.S.E., resigned.

HORDER, T. G., M.R.C.S.E., has been appointed Surgeon to the London Lead Company, Alston, Cumberland, vice G. H. Savage, M.D., L.R.C.P.L., appointed Assistant Medical Officer to the Bethlehem Royal Hospital for Lunatics.

KENYON, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Billinborough District of the Bourn Union, vice B. L. Powne, M.R.C.S.E.; also Acting Assistant-Surgeon to the 19th Lincoln Rifle Volunteers.

LANGDALE, H M., M.R.C.S.E., has been appointed House-Surgeon to the Sussex County Hospital, Brighton, vice W. H. Nicholl., M.R.C.S.E., resigned.

LINDSAY, A., M.D., has been appointed Lecturer on Medical Jurisprudence at Anderson's University, Glasgow, vice P. A. Simpson, M.D., appointed Professor of Medical Jurisprudence at the University of Glasgow.

LITCHFIELD, H. R. C., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Twickenham District of the Brentford Union, vice Thos. Litchfield, M.R.C.S.E., deceased.

MACMANUS, G., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Strangford Dispensary District of the Downpatrick Union, vice R. H. Cross, L.K.Q.C.P.I., M.R.C.S.E., resigned.

M'PHERSON, R., M.B., C.M., has been appointed Medical Officer for the Grassington and Kettlewell Districts of the Skipton Union, Yorkshire, vice W. Terry, M.R.C.S.E., resigned.

MARTIN, A. H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 1 and the Workhouse of the Evesham Union, Worcester-hire, vice A. Martin, M.R.C.S.E., resigned.

MORGAN, J. E., M.D., has been appointed a Visiting Physician to the Royal Lunatic Hospital, Manchester, for the ensuing year.

POLLARD, T. M., L.K.Q.C.P.I., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Dunkineely Dispensary District of the Donegal Union, vice W. Stephens, M.D., L.R.C.S.I., resigned.

RICE, D. J., L.R.C.S.I., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballylongford Dispensary District of the Listowel Union, Co. Kerry, vice E. Fitzmaurice, L.R.C.S.I., L.M., resigned.

RYAN, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Annacotty Dispensary District of the Limerick Union; and Medical Attendant to the Royal Irish Constabulary for Castleconnell and Annacotty, Co. Limerick, vice F. Wallace Furnell, L.R.C.P.Ed., L.R.C.S.Ed., deceased.

SHEARMAN, W. M., M.R.C.S.E., has been appointed House-Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, Manchester, vice R. H. Lloyd, M.R.C.S.E., appointed Resident Medical Officer to Lambeth Workhouse.

THOMAS, M., L.R.C.P.I., L.F.P. & S. Glas., Medical Officer for the Rectory District of the Parish of Marylebone, has been appointed (temporarily) Medical Officer for the St. Mary District, vice Hackney, appointed to the Fourth District of the Ba tle Union.

THORP, C. W., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Todmorden District of the Todmorden Union, Yorkshire.

WALKER, T. O., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the united Crick and Kilsby Districts of the Rugby Union, vice B. Kerr, M.R.C.S.E., deceased.

WILLIAMS, E., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Medical Officer for the Llangefni District of the Anglesey Union, vice J. H. Lloyd, M.D., M.R.C.S.E., resigned.

Births, Marriages, and Deaths.

BIRTHS.

COPE.—On the 21st ult., at Broad-green, Croydon, the wife of W. H. Cope, M.R.C.S.E., of a daughter.

LORRAINE.—On the 24th ult., the wife of W. J. Lorraine, M.R.C.S.E., L.R.C.P.Ed., of Wakefield, of a son.

PEARL.—On the 2nd inst., at Windsor, the wife of E. Pearl, M.R.C.S.E., of a daughter.

RUTHERFORD.—On the 1st inst., at Tinalinn, Lochgilphead, the wife of Jas. Rutherford, M.D., F.R.C.P.Ed., Medical Superintendent of the Argyll and Bute Asylum, of a son.

WILLIAMS.—On the 22nd ult., at The Abbey, Denbigh, the wife of Evan Peirce Williams, M.D., of a son.

MARRIAGES.

AVENT—O'HARA.—On the 6th of August, at St. Mary's Church, St. Kilda, Melbourne, Australia, Nicholas Avent, Surgeon, formerly of H.M.'s 66th Regiment, elder son of the late N. B. Avent, Surgeon, of Modbury, Devonshire, to Louise, fourth daughter of the late Henry O'Hara, of Mansfield, Co. Cork, Ireland.

DALTON—MOBBERLEY.—On the 19th ult., at Christ Church, Hampstead, Francis B. Dalton, M.R.C.S.E., late Surgeon-Major Royal East Middlesex Militia, to Mary, daughter of the late Wm. Mobberley, Esq.

PILKINGTON—WOODBRIDGE.—On the 26th ult., at St. Thomas's, Bishopwearmouth, Edward Pilkington, M.R.C.S.E., to Eliza Mary, daughter of the late H. W. Woodbridge, Esq.

DEATHS.

BADDELEY.—On the 17th ult., W. Baddeley, M.R.C.S.E., of Whalley, Lancashire.

FERGUSON.—On the 23rd ult., at Falmouth, J. Ferguson, M.D., of Elgin, aged 37.

GILLAM.—On the 21st ult., at South Lodge, Ham, I. J. Gillam, M.D., aged 53.

JONES.—On the 20th ult., at North Shields, D. H. Jones, Surgeon, aged 43.

LIVINGSTONE.—On the 11th ult., at St. John, New Brunswick, R. Hamilton Livingstone, M.D., aged 30.

LOE.—On the 26th ult. (suddenly, at the residence of J. S. Loe, Surgeon, of Leeds), Eliza Covernton Loe, eldest daughter of the late Charles Loe, Surgeon, of Leeds.

MACLEOD.—On the 28th ult., at Dalvey Cottage, Morayshire, Donald A. MacLeod, Esq., late Bengal Medical Service.

NIELL.—On the 30th ult., John Niell, M.D., of Croydon, late of Aldersgate-street, aged 65.

PORTER.—On the 23rd ult., James Porter, L.F.P. & S. Glas., of Glebe-street, Glasgow.

Medical Diary of the Week.

Monday, Oct. 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. W. B. Dalby, "On Non-purulent Catarrh of the Middle Ear."—Dr. Tracy (of Melbourne): "Case of Ovarian Dropsy operated on during an attack of Acute Peritonitis."

Wednesday, Oct. 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Oct. 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Oct. 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Southey, "On a Case of Acute Rheumatism with moderately high temperature and cerebral symptoms treated unsuccessfully with Cold Affusions"; and other papers.

Saturday, Oct. 12.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM.

IN next week's LANCET we shall commence the publication of a series of twelve Lectures on the Diseases of the Nervous System, by Dr. Anstie, being a part of Dr. Anstie's course of "Medicine" Lectures delivered at the Westminster Hospital during the coming winter.

Notes, Short Comments, and Answers to Correspondents.

SUNDERLAND HOSPITAL FOR SICK CHILDREN.

WE have noticed with much regret the unseemly exhibition of difference between the two medical officers of this hospital. We could not pretend on the strength of a newspaper report, and with a one-sided statement of the case, to form a judgment. But one thing is clear, that such disputes are highly injurious to the profession. They ought not to happen, and when they do happen they should be settled by arbitration. It is bad enough when medical men quarrel privately; but to quarrel over a public institution is much worse. It is quite possible that a Children's Hospital is not seriously required in Sunderland. If so, the collapse of it will not matter much. But its success or its failure should be entirely independent of professional differences.

Dr. Robert Grieve's (Hampstead) communication shall have our early consideration.

Mr. E. L. Walker, (Glasgow.)—We cannot indicate anyone by name.

THE HERTFORD BRITISH HOSPITAL.

WE have just received a copy of the amended Rules and Regulations of the Hertford British Hospital in Paris. The history of the hospital is soon told. It grew up during the two sieges of Paris. At first an appendage to an ambulance and a temporary expedient, it became within a year a permanent institution. It was in January, 1871, during the most distressing period of the German siege, that Sir Richard Wallace, Bart., so well known for his large-hearted and philanthropic exertions, determined to supply the urgent want of hospital accommodation for British subjects, and for that purpose wards immediately adjoining the hospital for wounded were opened. In October, 1871, Sir Richard intimated that he had resolved to build and endow in Paris a hospital with the same object, to be called the "Hertford British Hospital," in memory of the late Marquis of Hertford. As considerable time must necessarily elapse before a suitable site could be obtained, and permanent buildings constructed, Sir Richard hired premises, No. 5, Route de la Révolte, and had these altered and adapted for the reception of from 20 to 24 patients. On the 15th of November the building was opened for the reception of patients. The management of the hospital and the appointment of all its officers and servants are vested in a Committee, consisting of Sir Richard Wallace, Mr. Falconer Atlee (H.B.M. Consul), Sir John Rose Cormack, K.B., M.D., and the Hon. Alan Herbert, M.D. The two latter gentlemen have undertaken the medical and surgical care of the patients, and Dr. Shrimpton has been appointed honorary consulting physician. We heartily wish the undertaking every success, and congratulate British residents in Paris on the possession of such an institution.

THE communication of *Dr. Bostock* is acknowledged with thanks.

PHLEGMASIA DOLENS AND EMBOLISM.

To the Editor of THE LANCET.

SIR,—I send you an account of the following interesting case in the hope that you may find space for it.

Sept. 15th.—First saw Mary R——, aged twenty-one, a weak, chlorotic young woman, who was suffering from phlegmasia dolens of the left leg; the swelling extended into the groin, where the pain was most severe. Three weeks ago she menstruated slightly. On practising auscultation, a slight bellows-murmur was detected over the base of the heart and over the jugular veins; the "bruit de diable" was very distinct. I ordered her a dose of calomel and scammony (as the liver seemed sluggish), and a mixture of the tincture of perchloride of iron, spirits of nitrous ether, and tincture of hyoscyamus; also enjoined rest in the horizontal posture, warm fomentations assiduously applied to the limb, a linseed-meal poultice over the groin, and to take nourishing food.

16th.—Passed a bad night; pain still severe, and limb rather more swollen; the bowels acted once; urine normal, but scanty. To have a sixth of a grain of morphia added to each dose of the mixture, and a belladonna and opium liniment applied three times a day on hot flannels.

17th.—Much about the same; pain not quite so severe.

18th.—Limb swollen very much; faints if raised up. To take pills of quinine, iron, and gentian, and a mixture of ammonia and opium. To continue fomentations and poultice.

19th.—Better night.

20th.—Much better; pain almost gone, and has slept well; urine still scanty. To continue medicines and fomentations, and have a large poultice applied over lower part of back to encourage menstruation.

21st.—Not quite so well; at times the pain returns violently; menstruated slightly this morning. To take brandy-and-water at intervals, and continue the other remedies.

22nd.—Was called up hurriedly at 5 A.M., as she was reported dying. On arrival I found her struggling for breath; heart violently palpitating; the countenance of a leaden hue, and expressive of intense anxiety; body warm, with the exception of the upper extremities; passed no urine since the previous morning. I applied sinapisms over the chest, hot water to the feet; introduced catheter, and drew off about a pint of dark-coloured urine; but on attempting to administer ammonia, ether, &c., I could only prevail on her to swallow a small quantity, as she feebly gasped that it would kill her to drink. At 11 A.M. she died.

Unfortunately no post-mortem was allowed; but it appears to me that death was due to embolism of the pulmonary artery.

Will any of your readers who have had experience in these cases kindly say whether the injection of liquor ammoniæ into a vein would be advisable and of any benefit in the state of collapse? Yours, &c.,

September, 1872. W. A. D.

Inquirens.—If the present appointment works well, and without much complaint, the guardians would not like to make a change. If not, they might be disposed to appoint a medical man in the district. The one qualification is a weak point.

Mr. Edmonds, (Manchester.)—It is contrary to our custom to forward private answers. Let our correspondent consult any surgeon of repute in his own neighbourhood.

Dr. Boswell Reid should address his communication to the journal in which the strictures complained of appeared.

COMBINATION OF CHLORAL HYDRATE WITH BROMIDE OF POTASSIUM.

To the Editor of THE LANCET.

SIR,—In the article in your impression of Sept. 21st on Chloral, by Dr. Barclay, a combination of chloral hydrate with bromide of potassium is suggested as likely to be of benefit in the treatment of epilepsy. This I consider an accomplished fact. I have administered these remedies in that disease in the same mixture, in the proportion of fifteen grains of each salt, with marked benefit. Also in delirium tremens the same combination will be found most useful. Many cases in which the chloral hydrate alone will not produce sleep will yield readily if an equal proportion of the bromide be added to each dose. I have noticed this many times in my own practice, and the same effect has been reported to me by other practitioners.

Yours truly,

Leamington, Sept. 26th, 1872. JAMES THOMPSON, M.D.

FEBRIFUGES.

FEBRIFUGAL remedies, it would appear, owe their discovery, as a rule, to accident. We all know how the quinine-bearing chinchona first disclosed its virtues to the fever-stricken Peruvian, and the following incident is another case in point:—In 1535, Jacques Cartier, the first explorer of the St. Lawrence, had to winter at Stadaconda (now Quebec); but in a short time a sickness, terrible as well as new to the French soldiers, broke out in the fortress. Man after man fell ill till twenty died and fifty were despaired of. The brave Cartier was the only one at least who kept up the semblance of health, and managed to conceal the illness of his garrison from the hostile Indians. Some of these savages suffered as well as the French; and one day Cartier saw one of them in perfect health who ten days ago had been extremely ill. On inquiring what had effected the cure, Cartier had the medicine brought to him, and it came in the shape of the branches of a tree, called by the Indians "anneda." These branches were boiled in water, which was to be drunk every alternate day. The leaves of the plant also were to be laid upon the sores with which some of the sick were affected. Cartier's men at first took the prescription with suspicion; but having tried it, they persevered, and every one recovered. Assuming that the malady was fever, what was this plant? The French editor of Cartier's Travels identifies the anneda as the Epine vinetta, or barberry, which in Canada would be full of sap in the early season of 1536, and would also have young leaves.

Dr. Finlay.—Our correspondent acted with much propriety in the matter.

FRACTURE OF BOTH PATELLÆ BY MUSCULAR ACTION.

To the Editor of THE LANCET.

SIR,—I send you a report of the above case, believing it sufficiently interesting to occupy a place in the pages of your journal.

C. M——, female, aged about twenty-three years (Sept. 26th, 1870), on running down a flight of stairs, when near the bottom felt something give way at her knee, and fell to the stairs. On examination about fifteen minutes after the accident I found a transverse fracture of the left patella at about its centre, and separated three-fourths of an inch. Sanborn's method of treatment was adopted (Hamilton on Fractures and Dislocations). The patient was walking out of doors in five weeks; motion at joint good; union close, but ligamentous.

On April 20th, 1872, I was called to see the same person as above, and found a fracture of the right patella. She was sweeping the hall, and intended to sweep down a flight of stairs; but, on placing her right foot on the first step, she lost all power of her leg, and fell to a sitting posture. In this position she remained until my examination was over. Treatment as above; result the same.

Remarks.—The patient has enjoyed good health during all time within her recollection; she presents no trace of hereditary disease of any kind. On closely questioning her the following was elicited:—About ten days before each fracture an unusual sensation was felt when ascending or descending the stairs, described by the patient as a sensation of tiredness, located only across the knee; this was quite unusual, as she was possessed of excellent muscular development, and never felt tired after any ordinary exertion.

Points of interest:—1st. The small amount of muscular action required in this case to cause fracture, as no mis-step, fall, or stumble interfered with the usual mode of progression. The second fracture occurred when the patella sustained little more than the weight of the body. 2nd. Did the sensation of tiredness described above indicate a pathological condition of the patella, rendering it liable to fracture? If so, what is that condition? Can fracture of the patella caused by so trifling an expenditure of muscular power be explained without assuming some pathological condition of the bony tissue? I confess frankly I am unable to answer these questions.

Yours truly,

Halifax, Nova Scotia, Aug. 4th, 1872. THOMAS WELCH, M.D.

M.R.C.S., &c.—1. It is usual for the parochial medical officer in such cases to fill up certificates of lunacy, and a special scale of fees is arranged for this purpose by the Local Government Board. Any application to a relieving officer puts this plan in action as a matter of course.—2. As a mark of courtesy, the parochial medical officer might have communicated the fact of his visit to our correspondent, though it cannot be recorded that he was actually bound to do so.

Alma Mater.—We will make inquiries in the matter.

AUSTRALIAN WINES.

To the Editor of THE LANCET.

SIR,—In your report on Australian Wines you give the analysis of a "Tintara at 18s. per dozen." May I be allowed to state in reference to this wine that I have no Tintara under 30s. per dozen; neither have I sent you any at 18s., although I have an Australian red wine which is sold at the latter price. I trust, in fairness to Dr. Kelly, who is the grower of the Tintara, that you will draw attention in your journal to the mistake, as else the error, if not corrected, may prejudice the sale of that wine. I have also to say, with respect to the Pewsey Vale Vineyard, that it has no connexion whatever with the Tintara, being under quite a different proprietary, and that, therefore, the name should not be linked to that of the Tintara Vineyard.

On your report of the "Pewsey Vale" (Red), I may perhaps be allowed to remark that it is from one of the best vineyards in South Australia, and has always been considered a wine of a high class, and that your report is quite antagonistic to Dr. Druitt's opinion, who says of it that "the Pewsey Vale (Red) is a fine mature wine, grapy and potent, fit to rank with Hermitage."

I am, Sir, yours obediently,

Old Broad-street, Sept. 30th, 1872. P. B. BURGOYNE.

Note.—Supposing the source of the degree to be stated, and the holder to have other and registerable qualifications corresponding to his position in the public institution, he would be entitled to use the two letters, and assume the title. Our correspondent must apply to the respective Universities for an answer to his second question.

CALCUTTA WATER-SUPPLY.

THE Army Sanitary Commission remark, in a recent memorandum on Dr. Macnamara's Report on the Analysis of Potable Waters of Cantonments in the Bengal Presidency, that the new water-supply of Calcutta, in the hands of enlightened and energetic local authorities, bids fair to outstrip in purity the water-supply of London, although it is drawn from the river Hooghly at a point scarcely above tidal influence. It is right that attention should be called to the fact that, while discussions are being carried on in London regarding the amount of filth which may be included without injury in the costly water-supply of the metropolis of the Empire, the Calcutta authorities are straining every nerve to make their supply as pure as possible. In taking this course they show a far higher appreciation of the value to health of pure water than do some authorities at home; and we hope they will not relax their vigilance in this matter, and that their example will be followed here.

Mr. W. H. Griffiths.—We cannot hold out any hope at present.

ANEURISM OF AORTA.

To the Editor of THE LANCET.

SIR,—The following case appeared in my practice, which I should feel obliged if you would kindly insert in your columns.

John D——, aged twenty-six years, a tall, thin man, very spare, with a feeble pulse and bluish lips. He appeared at first sight to be in the last stage of consumption. His chest was narrow and rather contracted, with depressions above and below the clavicles; he had a dry spasmodic cough, with but little expectoration; his voice was almost like a whisper. At first he was an out-patient at —— Hospital, and without examination was pronounced to be in a decline. He was ordered cod-liver oil, and was told that his case was hopeless.

On Sept. 5th he presented himself at my rooms. I stripped him, and found every part of his chest perfectly resonant; the vesicular murmur was heard over all the region of the lungs; the sounds of the heart were very feeble. On percussion the dulness was rather more extensive than usual. He positively stated that he had only left his work five weeks ago, and that previously he had been in good health.

On Sept. 19th his wife died suddenly about 4 P.M. from disease of the heart. This agitated him very much, and he walked up and down the room seeming inconsolable, and then lay down on the sofa. His friends thought him to be asleep, but were much surprised to find that he was dead.

I made a post-mortem examination about twelve hours after death. Rigor mortis was well marked. The body was thin and wasted, but, except the heart, perfectly healthy. The lungs were remarkably sound. The pericardium was much distended, and upon puncturing it about two ounces of thin straw-coloured serum escaped. But what surprised me most was, that upon slitting up the heart-bag a clot of blood was found surrounding and enveloping the heart. This clot was fully one inch thick, and about a pound in weight; it was round, quite black and solid, and had evidently been in that situation for some time, as it had undergone changes; the colouring matter at the edges had been removed in various places, causing it strikingly to resemble the fibrinous clots found in the heart. There was an aneurismal distension of the arch of the aorta; but I could perceive no opening for the escape of blood. On cutting open the aneurism, it was found full of clots, and on the inner side I noticed several cicatrices.

I look upon this case as one of great interest; for the aneurism must have burst through a very small aperture, and the rapid flow of blood must have been prevented by the clots within the aneurism and those within the pericardium, thus showing that an attempt at repair had taken place. Of this I am quite sure, that the blood had remained within the pericardium for some time during life; for I made the post-mortem so shortly after death that the changes found in the blood could not have so rapidly taken place.

Yours truly,

Manchester, Sept. 25th, 1872. ROBT. C. SMITH, M.D.

Students.—It is difficult to answer such a question without having all the facts of the case before us. There is much to be said for exclusion; but forgiveness is a grand thing, and if there is any excuse for this course we should be disposed to recommend it. Should it be followed, however, it would be right to exact an expression of regret. There are no morals like the Christian ones: "If thy brother repent, forgive him."

Dr. Sargent.—Greek is not a compulsory subject. Our correspondent's inference is correct.

THURSO.

A MANUSCRIPT has been received (with the above post-mark) on a case of Fracture of the Cranium, but no signature is attached.

HOSPITAL AND CLASS FEES.

To the Editor of THE LANCET.

SIR,—I believe I express the opinion of the profession generally, and that of its younger members in particular, when I say it would be considered an inestimable boon if the authorities of our metropolitan and provincial hospitals would make a special reduction, for the benefit of qualified practitioners, in their fees for admission to the classes and hospital practice. Most young medical men in town have always a few hours daily at their disposal, which could not be better utilised than by increasing their knowledge in a lecture-room, or supplementing their experience in a surgical or medical ward; yet the high fees now required would, in the majority of cases, prevent them from taking advantage of these great institutions; for it is unfair to expect young men to pay out of their small incomes such a fee as St. Bartholomew's demands for hospital practice alone—viz., 38 guineas! There are also perpetual pupils of one hospital, living and practising at a distance from it, and in the neighbourhood of another, yet even to these no concession is made by the latter. This, therefore, is another direction in which the already wide-spread usefulness of our hospitals may yet be a little extended with benefit to the profession, to whom, indeed, our hospital system owes much of its life and all its efficiency.

I trust, Sir, you, as well as other influential medical men, will take in hand the suggestion I have made, and I have no doubt that the question under such circumstances will be carried to a successful issue.

Your obedient servant,

September, 1872. JUVENIS.

GAOL *versus* LUNATIC ASYLUM.

AT Salford a man, named Joseph Rollins, ascertained to have escaped from an asylum, and pronounced by a medical man, Dr. Benjafield, to be of unsound mind, has been sent to gaol for a month, without hard labour, for beating an old man, and compelling him to kneel down and say his prayers; also for somewhat indecently treating a young woman who went to see what was going on in consequence of shouts and screams from the old man's house. The case seems to us one in which the magistrates have incurred a great responsibility.

Z. B.—Our correspondent's observations do not contain anything new. Such an incision as he describes is sometimes made in the operation in question.

PUS AND CANCER.

To the Editor of THE LANCET.

SIR,—Much attention has been bestowed of late, and much information has been gained, concerning the order and conditions of the phenomena of suppuration; and, considering the importance of the subject, it may not be unworthy the attention of your readers to hear the few remarks I am about to offer in further elucidation of the subject.

Looking, then, at the first step in the process—the migration of the first white corpuscle,—let us see if its positional relations, its subsequent changes, its action on surrounding tissues, will not furnish us with ideas of resemblance so closely allied to the phenomena evidenced in other processes as to give us truer and clearer notions of its pathology. Is it not in itself a growth differing more or less widely, yet always differing, from any tissue into which it may have immigrated, having its normal habitat in the blood-vessels, and constituting an important element of the liquid tissue therein contained? Is it not found capable of supporting itself, and continuing its kind, at the expense of the pabulum furnished to the tissue containing it, and possessed, too, of a power and tenacity of assimilation over the latter characteristic at once of its lowly organisation and heterogeneity? And, further, does it not cause the absorption of surrounding tissues, or at least occasion such a process of softening and disintegration as ends in the destruction of almost every tissue in contact with it, and the substitution of its kind? And, lastly, does it not give rise to secondary deposits in the viscera and elsewhere, inducing a condition of cachexia and rapid dissolution unequalled even in growths especially designated malignant—the carcinomata, which, moreover, in all their varieties, still, to an extent, retain the type of pus, and consist of cells without intercellular substance? Thus, then, our notions of pus should be modified somewhat and generalised, so as to view it as but a special instance of a heterologous growth, forming with others a group possessed of many common clinical characters denoted by the term "malignant." Yours truly,

September, 1872. X. Y. Z.

Rev. J. W. C., (Bow.)—We regret that we cannot comply with our correspondent's wishes. However desirable the appearance of such paragraphs may appear to him, we think he must perceive that they would be quite out of place in a medical journal.

Mr. C. Owens (Long Stratton, Norfolk) had better put himself in communication with some medical publishing firm. We regret that we cannot afford him the required information.

OPERATION UNDER CHLOROFORM ADMINISTERED DURING SLEEP.

To the Editor of THE LANCET.

SIR,—Having occasion to perform circumcision on a very nervous child, aged six years, and the evening being selected by the parents for the operation, I found on my arrival the little patient fast asleep. Not wishing to lose so good an opportunity, I, with my friend Mr. Gandy, thought it advisable to administer chloroform at once. This was done by pouring ten drops on a piece of lint, and repeating it until one drachm had been given, when the patient was thoroughly under its influence. The operation was then performed, and the patient dressed, not waking till half an hour after. The pulse did not appear to differ from that ordinarily observed during the administration of chloroform. It would be interesting to know if this mode of giving chloroform has been noticed by the profession, and whether in nervous patients and young children it would not be preferable to the shock to the system occasioned by fright and fear of suffocation.

I am, Sir, yours obediently,

Hounslow, Sept. 29th, 1872. W. M. WHITMARSH, M.D.

Rus.—The best medical guide for a young married lady is her own doctor. If a doctor is not available—there are such unfortunate situations—perhaps Kesteven's Domestic Medicine, or a series of papers on this subject in Cassell's Domestic Guide, might be recommended.

Mr. J. B. Kenny.—The best method is to establish a permanent opening at the root of the finger before dividing the band of skin, none of which should be removed. But the cure is always difficult and uncertain.

AN ASSISTANT'S GRIEVANCE.

To the Editor of THE LANCET.

SIR,—In reply to the requirements of an advertisement in your journal three weeks since, I forwarded manuscript copies of my testimonials to "M.D., Post-office, Liverpool." They have not been returned up to this date, and I am put to great inconvenience, and left to thank my good fortune in not having sent the originals, which no amount of money could replace. By kindly inserting this you may recover my lost property for me, and possibly discover amongst your readers of my class other victims of this injustice and carelessness on the part of "M.D., Liverpool." If you will do so you will confer a favour on, Your obedient servant,

September 24th, 1872. M.D., M.R.C.S., L.A.C.

Mr. Richard Marley is thanked for the offer of the old book mentioned, which we should be glad to see. The advertisements in question are perhaps scarcely worth notice. They cannot have any effect on the repute of the profession.

Inquirens, (Gainsborough.)—We do not think that our correspondent would derive any advantage from not entering at once at the University where he hopes to graduate.

J. P.—1. Whatever Mr. Cardwell may have said, the new War Office circular with regard to medical officers of volunteers attending the permanent staff at the contract rate of 2*d.* a week has not been cancelled. Under the decision of the late Sidney Herbert, a medical officer of a volunteer corps attending a drill sergeant or family made a regular claim at ordinary charges, which was paid by the War Office authorities. We are unable to say which of these modes of payment is followed at present; but we would recommend our correspondent to send in a fair and reasonable claim.—2. The Honorary Secretary of the Association is Mr. Spencer Smith, Queen Anne-street.

Mr. L. B. Denton.—We do not pledge ourselves to insert any papers.

REGISTERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—In reporting hospital cases I always felt the trouble of getting at a clear previous history of the majority of patients. I should think such a register as that mentioned by Dr. Smith, in his letter which appeared in THE LANCET of Sept. 21st, would remove this trouble, and be of great assistance to the clinical clerk in taking notes on a patient's case, especially those patients who come from some distance, and bring no letter from their medical man. Can any of your readers inform me where the forms Dr. Smith mentions are to be obtained?—I am, Sir, yours very truly,

October 1st, 1872. A LATE CLINICAL CLERK.

M.R.C.S.E. and L.A.C. should forward particulars to the Apothecaries' Company. There is no breach of the Medical Act so long as false titles are not assumed. But the Apothecaries' Company might consider their privileges involved.

AGUE.

M.B. asks: "Would any of the readers of THE LANCET kindly recommend a remedy for intermittent fever, from which the writer has now suffered for more than eight years? The disease was contracted in India; but the last four years and a half have been spent in England. Quinine has been repeatedly taken in from twenty-five to fifty grain doses, sometimes with slight, but generally without any benefit. The alkaloid always causes much gastric disturbance. Fowler's solution in five-minim doses, with tincture of muriate of iron, has been used daily for several months. The subcutaneous injection of soluble quinine (three grains) was tried for a short time, but given up on account of the local irritation produced. Frequent change of air has not had much effect, if any."

WE have been compelled to make short *précis* of one or two Introductory Lectures, the abstracts not having been forwarded by the authors at the required time.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. S. Wilks; Dr. Thorowgood; Dr. Philipson; Dr Allbutt; Dr Rutherford; Mr. Hall; Mr. Wilkins; Dr. Stewart, Belfast; Mr. Caulfield, Worcester; Mr. Davies, Cardigan; Mr. W. Kelsey; Mr. Pennethorne; Mr. J. Poulton, Redhill; Dr. Harding, Whittlesea; Mr. Pearl, Windsor; Mr. P. S. Cramer, Jersey; Mr. Morton, Sheffield; Mr. Birch, Hull; Dr. Curran; Mr. R. Baker, Watford; Mr. Craven, Warwick; Mr. Cousins, Hampton; Mr. Williams, Bala; Dr. Pye Smith; Mr. Wood, Guildford; Mr. Bedford; Mr. Turner, Ipswich; Mr. Read, Salisbury; Dr. Bernhard, Geneva; Mr. Campton, Oakham; Rev. J. Berrington; Dr. Mackintosh, Callington; Mr. Reid, Geelong; Dr. Robertson, Hayward's Heath; Mr. R. Macrae; Dr. Date, Crewkerne; Mr. Wilton, Bristol; Mr. Weston, Devonport; Mr. P. Henniker, Perth; Dr. Allchin; Mr. Austen, Horley; Dr. Muir, Stewarton; Dr. Whitmarsh, Hounslow; Mr. Morris; Mr. Hunt, Ipswich; Mr. R. Marley, Bromyard; Dr. Pasquin, Madrid; Dr. Bennett, Tarbet; Dr. R. Grieve, Hampstead; Mr. Benjafield, Stockport; Dr. Taylor, Grenada; Dr. Williams, Denbigh; Dr. Smith, Baltimore; Dr. De Renzy; Mr. F. Edmonds, Manchester; Mr. Burgoyne; Dr. Sargent; Dr. Kenyon, Billingborough; Dr. Latham, Cambridge; Mr. Davis; Mr. Owens, Long Stratton; Mr. Jeynes, Salford; Mr. Chater, Darlington; Mr. Abbey, Norwich; Dr. Taggart, Antrim; Dr. C. Black; Mr. Crowley; Mr. Evans, Barbourne; Mr. Bradley, Boston; Mr. Whidborne, Crediton; Dr. Calvos; Mr. Yonge; Dr. Duncan, Buckton; Mr. Coleman; Mr. Moore, Sandwich; Mr. Mansell; Dr. Baxter, Dr. Gore, Curragh Camp; Mr. Monks; Dr. Lorraine; Mr. Lydall; Mr. Bradshaw; Mr. R. Crosse; Dr. Jones, Menai Bridge; Mr. W. Philson, Cheltenham; Dr. Delvaille, Bayonne; Mr. Pearce; Dr. C. Gregoris Fedeli, Rome; A Bombay Army Surgeon; M.R.C.S.E.; N. L.; A late Clinical Clerk; K. Z.; M.D., M.R.C.S.; Alma Mater; &c. &c.

Downpatrick Recorder, Bury Times, Lincoln Gazette, Monthly Microscopical Journal, Archives Générales de Médecine, Veterinarian, Popular Science Review, Canada Medical Record, Anti-Game Law Circular, Local Government Chronicle, Medical Temperance Journal, Auckland Evening Star, and *South London Journal* have been received.

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